United Nations A/58/75–E/2003/21

General Assembly
Economic and Social Council

Distr.: General
12 June 2003

Original: English

General Assembly
Fifty-eighth session
Item 105 of the preliminary list*
Permanent sovereignty of the Palestinian people in the Occupied Palestinian Territory, including East Jerusalem, and of the Arab population in the occupied Syrian Golan over their natural resources

Economic and Social Council
Substantive session of 2003
30 June-25 July 2003
Item 11 of the provisional agenda**
Economic and social repercussions of the Israeli occupation on the living conditions of the Palestinian people in the occupied Palestinian territory, including Jerusalem, and the Arab population in the occupied Syrian Golan

Report prepared by the Economic and Social Commission for Western Asia on the economic and social repercussions of the Israeli occupation on the living conditions of the Palestinian people in the occupied Palestinian territory, including Jerusalem, and of the Arab population in the occupied Syrian Golan

Note by the Secretary-General***

In its resolution 2002/31 of 25 July 2002, the Economic and Social Council requested the Secretary-General to submit to the General Assembly at its fifty-eighth session, through the Council, a report on the implementation of the resolution. The General Assembly, in its resolution 57/269 of 20 December 2002, also requested a report. The Secretary-General has the honour to transmit the report requested, which has been prepared by the Economic and Social Commission for Western Asia and is submitted in response to the two resolutions. A report on assistance to the Palestinian people, covering the period June 2002 to May 2003, is also being submitted to the General Assembly through the Economic and Social Council, as requested in resolution 57/147 of 16 December 2002. The annual report of the Commissioner-General of the United Nations Relief and Works Agency for Palestine Refugees in the Near East provides information, inter alia, on the socio-economic conditions of the registered population in the occupied Palestinian territory.[1]

* A/58/50/Rev.1 and Corr.1.
** E/2003/100.
*** As official sources were lacking for most of the information contained in the present report, a longer period for clearance was required for extensive consultations within the various United Nations entities at Headquarters and in the field. The report was therefore delayed two weeks for processing.

03-39666 (E) 080703

Report prepared by the Economic and Social Commission for Western Asia* on the economic and social repercussions of the Israeli occupation on the living conditions of the Palestinian people in the occupied Palestinian territory, including Jerusalem, and of the Arab population in the occupied Syrian Golan

Summary

The occupation of Palestinian territory by Israel continues to have a serious detrimental effect on all aspects of the living conditions of the Palestinian people.

The Israeli army has continued to resort to excessive use of force, arbitrary detention, house demolitions, increasingly severe mobility restrictions and closure policies, as well as the confiscation and bulldozing of productive Palestinian agricultural land.

The Palestinian economy continues to accumulate losses, currently equal to half of its annual gross domestic product. Unemployment has increased threefold, and poverty has risen among more than two thirds of the population.

Women and children bear a special and enduring burden resulting from the occupation. Palestinian children face exposure to mounting violence, and their access to educational opportunities and health facilities have been reduced to unacceptably low levels. Educational outcomes are consistently declining, as are nutritional standards and public health conditions.

As noted in previous reports, Israeli settlements in the occupied Palestinian territory remain one of the principal issues fuelling the conflict between the two peoples. The geographic distribution of Israeli settlements in the occupied Palestinian territory severely restricts the growth of the Palestinian communities.

The Israeli-occupied Syrian Golan Heights continues to witness settlement expansion beyond the 33 settlements already in place. Social services such as schooling, higher education and medical facilities remain insufficient for the Arab population in the Syrian Golan Heights.

* The Economic and Social Commission for Western Asia would like to acknowledge with appreciation the substantive contributions of the United Nations Children's Fund, the United Nations Conference on Trade and Development, the United Nations Population Fund, the United Nations Relief and Works Agency for Palestine Refugees in the Near East, the Office of the United Nations High Commissioner for Human Rights, the World Health Organization and the Office of the United Nations Special Coordinator in the Occupied Territories to this report.

I. Introduction

1. In its resolution 2002/31 of 25 July 2002, the Economic and Social Council stressed, inter alia, the importance of reviving the Middle East peace process on the basis of Security Council resolutions 242 (1967) of 22 November 1967, 338 (1973) of 22 October 1973 and 425 (1978) of 19 March 1978, and the principle of land for peace as well as the compliance with the agreements reached between the Government of Israel and the Palestine Liberation Organization, the representative of the Palestinian people. The resolution reaffirmed the applicability of the Geneva Convention relative to the Protection of Civilian Persons in Time of War, of 12 August 1949, to the Occupied Palestinian Territory, including Jerusalem, and other Arab territories occupied by Israel since 1967. The resolution stressed the need to preserve the territorial integrity of all of the Occupied Palestinian Territory and to guarantee the freedom of movement of persons and goods in the territory, including the removal of restrictions on going into and from East Jerusalem, and the freedom of movement to and from the outside world. The Council reaffirmed the inalienable right of the Palestinian people and the Arab population of the occupied Syrian Golan to all their natural and economic resources and called upon Israel not to exploit, endanger or cause loss or depletion of those resources. It also reaffirmed that Israeli settlements in the Occupied Palestinian Territory, including Jerusalem and the occupied Syrian Golan, were illegal and an obstacle to economic and social development. The Council requested the Secretary-General to submit to the General Assembly, through the Council, a report on the implementation of the resolution.

2. In its resolution 57/269 of 20 December 2002, the General Assembly reaffirmed the inalienable rights of the Palestinian people and the population of the occupied Syrian Golan over their natural and economic resources, including land and water; and called upon Israel, the occupying Power, not to exploit, cause loss or depletion of or endanger the natural resources in the Occupied Palestinian Territory, including Jerusalem and the occupied Syrian Golan. In the resolution, the Assembly recognized the right of the Palestinian people to claim restitution as a result of any exploitation, loss or depletion of, or danger to, their natural resources, and expressed the hope that this issue would be dealt with in the framework of the final status negotiations between the Palestinian and Israeli sides. The Assembly requested the Secretary-General to submit a report to it at its fifty-eighth session.

3. On 30 April 2003, the Secretary-General warmly welcomed the formal presentation of the road map for Middle East peace, declaring that it gave the Israeli and Palestinian people a real chance to end their long and painful conflict, and thus a chance for all the people of that troubled region to establish, at last, a just and comprehensive peace. The Secretary-General expressed his belief that the road map's goal of two States, a secure and prosperous Israel and an independent, viable, sovereign and democratic Palestine, living side by side in peace and security, must be the focus of all energies and efforts.

4. It has been noted that humanitarian assistance is not the answer to the crisis in the occupied Palestinian territory. The crisis is fundamentally political, as observed by the United Nations Technical Assistance Mission following its visit in October 2002 to the Occupied Palestinian Territory: the crisis will continue to worsen unless political decisions are taken to lift closures, curfews and other restrictions on the civilian population. Durable and productive security cannot be achieved by violence

or the construction of walls and barricades. It depends on trust and respect between people.[2]

II. Occupied Palestinian Territory, including Jerusalem

Deaths and injuries

5. From the beginning of March 2002 until 7 May 2002, Israel endured an estimated 16 bombings, the large majority of which were suicide attacks. More than 100 persons were killed. On 29 March 2002 Israel launched Operation Defensive Shield. The operation included incursions into a number of Palestinian cities, including Jenin, which have resulted in numerous Palestinian civilian deaths (see A/ES-10/186). As the report of the Secretary-General prepared pursuant to General Assembly resolution ES-10/10 indicated, a total of 497 Palestinians were killed in the course of the Israeli army reoccupation of Palestinian area A from 1 March to 7 May 2002 and in the immediate aftermath.[3]

6. The Palestinian Ministry of Health reported 2,520 Palestinian deaths by occupation forces between 29 September 2000 and 24 September 2002. Israel reported 624 Israeli deaths from 27 September 2000 to 26 September 2002. Several thousand injuries have resulted on both sides. However, the Palestinian death rate has been at such a high level that it has directly affected the general Palestinian mortality rate, which has increased by about 2 per cent since 2001.

7. Israel continues to pursue a policy of extrajudicial killings of Palestinians suspected of involvement in armed attacks against Israelis. In 2002, there were 51 extrajudicial killings/attempts, resulting in the death of 66 suspected persons and 46 bystanders.

8. Many of the civilians killed have been children. Over 450 children have been killed in the conflict since September 2000. The Israeli army and settlers have killed 367 Palestinian children (under 18). However, Palestinian attacks on Israeli targets have killed 82 Israeli children.

9. Medical facilities and personnel administering to the wounded have been attacked. The Israeli army has killed 18 health workers and injured 370; and it has damaged 240 ambulances and destroyed 34.

Arbitrary arrests and detentions

10. The Israeli army's house-to-house searches have affected from 30 to 50 per cent of Palestinian homes in various areas of the occupied Palestinian territory, and between 12 and 36 per cent of households have reported the arrest of at least one family member. Mass arrests were conducted, as illustrated by the Friday, 29 March 2002 raid on Al-Bireh (West Bank), where the occupation army assembled all male residents aged 15 to 45 in a school yard. They forced the majority to remain in the school throughout the day and night, releasing some the next morning, but hauling others away in buses.

11. During the two major Israel army incursions into the occupied Palestinian territory, in February and in late March 2002, the number of Palestinians arrested

was 10,000. Some have been released, but about 4,000 persons remain in detention, including 38 women prisoners (A/57/207, para. 37). Prior to the launch of Operation Defensive Shield, 60 Palestinians had been held in administrative detention. According to B'Tselem, an Israeli non-governmental organization, as of January 2003, more than 1,000 Palestinians were being held in administrative detention.[4]

12. Israeli forces have also detained local staff of the United Nations. The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) has been refused access to and information about its detained staff members. The United Nations Relief and Works Agency for Palestine Refugees in the Near East has also complained that its buildings have been used repeatedly as detention centres. On 9 April 2002, special Israeli forces and army units broke into the UNRWA Ramallah Men's Training Centre, arresting its dean and 104 others.

13. Children are affected by arbitrary detention, not only by being deprived of family members and their right to visit them in detention, but also as detainees and prisoners themselves. A total of 280 children have been detained. The Israeli army has confirmed that it prohibited Palestinian juvenile detainees at Ofer Camp from meeting their families and from continuing their studies.[5]

Population displacements

14. The destruction of Palestinian homes and the military siege and curfews on residential areas have had multiple effects on the population of the occupied Palestinian territory, including Jerusalem. Both those rendered homeless and those facing military threat in their place of residence have been obliged to seek refuge elsewhere. At the end of the 2002 incursions, between 23 and 37 per cent of the families housed other families as a result of life-threatening danger around the displaced family's home, demolition or confiscation of homes by the Israeli army, or being stranded and unable to reach home.

15. From late 2000 through 2002, Israeli measures have compelled some 70,000 Palestinians (1.3 per cent of the West Bank population, and 2.6 per cent in the Gaza Strip) to change their residence. Direct military activity has caused 60 per cent of the displacements. Those forced to endure long detentions and humiliation by the Israeli military at checkpoints have had to shift residences to ensure access to work or study. More than two thirds of the displaced persons expected the change to be temporary, which implies yet another displacement in the future. Statistics show a higher proportion of displaced males than females (15/20).

16. The military siege, closures and curfews also isolate residential areas for long periods. In certain areas, especially Al-Muwasi, in the southern part of the Gaza Strip, and in Al-Syafa, in northern Gaza, the siege has meant full isolation. Only local residents are allowed in and out, at the army's discretion. Construction materials are not allowed to enter, nor are medical personnel. Hundreds of families have been displaced as a result, and such population transfer appears to be the objective of military operations, extinguishing all aspects of normal life for Palestinians living near Israeli settlements.

Property destruction

17. In November 2001, the Committee against Torture concluded that Israeli policies of closure and house demolition may, in certain circumstances, amount to cruel, inhuman or degrading treatment or punishment, and called on Israel to desist from the practice (CAT/C/XVII/Concl.5, paras. (i) and (j)). The Israeli forces escalated their acts of forced eviction, seizure, demolition and closure of Palestinian structures throughout the occupied Palestinian territory in 2002 and 2003. During the period, Israeli forces demolished well over 1,275 Palestinian homes. UNRWA has reported that, between March and November 2002, the army destroyed 304 refugee homes in the West Bank, in addition to the approximately 600 refugee housing units destroyed in their assault on Jenin (April 2002).

18. Following the army incursions of spring 2002, between 31 and 87 per cent of Palestinian families in the Occupied Palestinian Territory reported considerable destruction to their neighbourhoods, and between 28 and 59 per cent reported exposure to shooting and/or destruction of their homes. In the single raid on Jenin refugee camp, the Israeli army completely destroyed some 600 homes with bombs and bulldozers, leaving an additional 200 homes unfit for habitation and 1,250 families (over 6,000 individuals) homeless, including a majority of children.

19. On 29 January 2003 in Rafah, the Israeli army shelled the Tal al-Sultan neighbourhood. The destroyed apartments had been newly built to house Palestinian families that army attacks had previously rendered homeless. The families were to take delivery of the new apartments on 1 February 2003.[6]

20. Such operations are accompanied by intensive fire, preventing the victims from salvaging their belongings. In most cases, the Israeli authorities do not warn the affected civilians in advance. Israel has escalated the destruction of Palestinian homes with explosives since early September 2002, following the policy of destroying the homes of Palestinians suspected of armed resistance.

21. During 2002, in occupied Jerusalem, Israeli authorities escalated the demolition of Palestinian houses by destroying more than 120 structures of different types. This practice has reached its highest level since 1987.[7]

22. In the Gaza Strip, a total of at least 2,424 Palestinian homes had been damaged by the end of 2002. The Israeli army has completely destroyed 704 homes, leaving 23,122 people homeless, including a majority of children. This preceded the army's destruction of 439 Palestinian homes in the north Gaza governorate in 2003, representing a sharp increase over the rate of destruction in 2001-2002.[8]

23. In addition to family homes (worth $66 million in 2002), the Israeli army has destroyed private assets in the form of buildings; equipment and inventory ($97 million); physical infrastructure ($88 million, of which $64 million were road networks); cultural heritage ($48 million); Palestinian Authority assets, including ministries and municipalities ($20 million); private and public cars ($6 million); and non-governmental organization and private social services ($56 million). Loss of institutional memory and equipment have made basic functions impossible, particularly with the Israeli army's destruction and confiscation of vital records, computers and software in the key Palestinian Authority ministries (Finance, Education and Interior). The army's destruction of water, electricity generation facilities and grids, solid waste disposal stations and road networks, and its

confiscation of equipment and machinery of private institutions alone have generated an estimated $360 million in losses in April 2002.[9]

Mobility restrictions and closure policies

24. Between 1 October 2000 and 31 December 2002, Israeli authorities closed the main Gaza crossing at Erez checkpoint completely for 362 days, and partially for 262 days. Erez industrial zone was closed for 67 days; Karni commercial crossing was completely closed for 143 days and partially for 41 days. Sofa was closed for 275.

25. In May 2002, Israel introduced a new feature to the pass system under which Palestinian residents need special permits from the Israeli Civil Administration to travel between Palestinian localities within the West Bank and the Gaza Strip. The new policy formally fragmented the West Bank into eight blocks, creating 64 Palestinian distinct enclaves, maintained by 46 permanent checkpoints and 126 roadblocks.

26. The Israeli Government has initiated the construction of physical barriers running through the West Bank to separate the Israeli and Palestinian populations, initially with over 100 kilometres of high concrete walls, fences, buffer zones, trenches and security watchtowers. According to the long-term plans, two walls will extend the entire 360-kilometre length of the West Bank.[10]

27. The construction is taking place in the most fertile and dense agricultural valley areas of the western Occupied Palestinian Territory. It has already severed farmers from their plots. In the Qalqilya governorate alone, the wall will stretch along the fields of 300 farmers, and 1,000 farmers will lose significant portions of land to the western side of the wall. The loss of wells will deprive the remaining accessible land of water needed to farm it, while the close proximity of Israeli armed guards will pose a threat to farmers cultivating what fields remain. As of December 2002, documentation of wall-related destruction of agricultural land and assets had been conducted in 53 communities in Jenin, Tulkarm and Qalqilya districts, an area containing an estimated population of 141,800. Direct damage to those communities from wall and barrier preparations and construction up to that time included the destruction of some 83,000 olive and other fruit trees, and 615 dunums of irrigated land, including greenhouses, 37 kilometres of water networks and 15 kilometres of agricultural roads. In addition, a total of 238,350 dunums of land (238.3 square kilometres) were being isolated between the Green Line and the Wall; 57 per cent of that area was cultivated land, planted mostly with olive trees and field crops.[11]

Israeli settlements

28. The geographic distribution of Israeli settlements in the Occupied Palestinian Territory continues to severely restrict the growth of Palestinian communities and is an obstacle to their economic and social development. The settlements have been condemned as illegal under numerous resolutions of the Security Council and the General Assembly.

29. Forty-five Israeli settlements are being expanded by 11,128 dunums; four of the settlements are new, and the new outposts (care vans) number 113, spread across the West Bank.

30. Israel contends that the expansion of settlements is a function of the existing population's "natural growth". This term has never been precisely defined. Successive Israeli Governments have strongly encouraged migration from Israel to the settlements by offering generous financial benefits and incentives. The current annual increase of 11 to 12 per cent in settler numbers far exceeds the 2 per cent population growth inside Israel (E/CN.4/2003/5/Add.1).

31. A critical factor affecting Palestinian life is the lavish allotment of land resources for settlement. Planning maps remain largely inaccessible to the public. However, available data indicate that the authorities have allotted 41.9 per cent of all the West Bank to settlements as building, planning and development zones.[12] For example, in the Migilot settlement in the Judean desert, Israeli planning authorities have allotted 700,000 dunums of land to its settler population of 900 (E/CN.5/2003/5/Add.1, para. 39).

32. The Israeli Government finances some 50 per cent of settlement costs in the Occupied Palestinian Territory and 25 per cent of housing inside the Green Line. Israeli illegal settlers in the Occupied Palestinian Territory, who recorded the highest per capita income of Israelis in the 1990s, receive $520 per capita in subsidies from the budgets publicly disclosed, while, in the communities of Arab citizens of Israel, the most disadvantaged individuals receive the equivalent of $235 in public benefits.[13]

33. In its 2002 budget, the Government of Israel appropriated $154 million for infrastructure, industrial investment grants, housing, agricultural programmes and educational subsidies for the settlements. For 2003, it is devoting 1.9 billion new sheqalim (NIS) ($452 million) from its budget for the settlements.[14]

34. It is reported that there are plans to construct five new settlements in Rimal Halutza, in Gaza near the Egyptian border. The location is planned to attract around 15,000 Israelis into an area of 80,000 Palestinian dunums, with implementation anticipated in 2004.[15]

35. Settler bypass roads also impose the demolition of structures and closure of over 150 metres of Palestinian lands to each side.[16] The bypass roads link Israeli settlements to each other and to Israel proper, and this easy access allows for attractive living conditions for settlers, thus facilitating the expansion and consolidation of settlements. The network divides the occupied Palestinian territory into areas separated and surrounded by military-controlled roads, cutting the Palestinian areas into a number of isolated homelands. That network, along with other planning restrictions, prevents the development of Palestinian towns and villages, exacerbates overcrowding, prevents Palestinian territorial contiguity and further disconnects Palestinian communities from each other. The network undermines the Palestinian economy by restricting movement and impeding commerce.

36. Settler actions against Palestinians include erecting roadblocks to disrupt normal movement, shooting at roof-top water tanks, burning cars, smashing windows, destroying crops and uprooting trees, and harassing merchants. Settlers have also attacked paramedics and fire fighters. Monitors recorded at least 156 cases of such attacks during the period 1 March to 30 November 2002. Settler violence in

the past year concentrated on preventing and confiscating the autumn olive harvest in the West Bank, the main source of livelihood for most rural Palestinians.

37. The confiscation of land and properties is a dominant feature of Israeli occupation and population transfer policy. The confiscated land area has reached well over 70 per cent of the entire West Bank; and in the Gaza Strip, rougnly one third of the land. Settlements implanted near built-up Palestinian areas impose a 500-metre buffer zone, creating a planning pretext for removing Palestinian homes and buildings and confiscating a wide swath of land around the settlements, at the expense of the Palestinian owners.

38. By end February 2002, the army had destroyed 31,283 hectares of agricultural land and 485,665 trees in the Occupied Palestinian Territory, leaving 5,243 farmers without a livelihood.[17]

Water and environment

39. Palestinian entitlements to water include the aquifers of the West Bank and the Gaza Strip, in addition to their rightful share as riparians of the Jordan River. However, patterns of Israeli military and settler land use coincide with severe discrimination against Palestinians in access to water throughout the Occupied Palestinian Territory and excessive consumption by the Israeli settlements (see E/C.12/1/Add.27, paras. 10, 24, 32 and 41).

40. Israel extracts more than 85 per cent of the Palestinian water from the West Bank aquifers, accounting for about 25 per cent of Israel's water use. Under Israeli restrictions, Palestinian water consumption per capita is 82 cubic metres as compared with 326.5 cubic metres for Israeli citizens and settlers. Figures for daily per capita water use indicate that Israelis use five times more water (350 litres) than Palestinians (70 litres). In the water-scarce Gaza Strip, Israeli settlers consume 584 litres per day, or about seven times the Palestinian per capita consumption there. Moreover, leakage from poor infrastructure is estimated to decrease the Palestinian allotment by another 24 to 36 per cent.[18] The World Health Organization (WHO) recommends a 100-litre per capita minimum daily consumption.[19]

41. In a pre-dawn assault on 29 February 2003, Israeli tanks and army bulldozers invaded Rafah (Gaza Strip) and completely destroyed the town's two main water-wells. The wells had produced 50 per cent of the town's scarce water resources.[20]

42. About 150 Palestinian communities have no independent water supply. Army closures and movement restrictions have cut them off completely from any water source. Armed Israeli settlers and uniformed soldiers occasionally destroy cisterns, contaminate collection tanks and damage pumps belonging to Palestinians. Israeli soldiers have destroyed water supplies of refugee camp families by shooting holes in roof-top cisterns.[21]

43. The shortage of water has obvious effects on the region's fragile environment. At the Wadi Gaza catchment, extending from Jabal Khalil (West Bank) to the Gaza coast, a levee on the Israeli side prevents the natural flow of water from reaching Gaza, although some flooding occasionally takes place. Aerial photos show the Gaza border as demarcating a land deprived of water. The site where the Israeli army recently extirpated some 26,000 trees had been the only significant green area in the northern Gaza Strip east of Beit Hanun.[22] The Israeli occupation has also left

95 per cent of the few forested areas in the Gaza Strip denuded.[23] The remaining green areas, such as El-Mawasi on the south Gaza coast, are the sites of intense settler activity and the current subject of Israeli military siege and comprehensive curfew on 15,000 Palestinian citizens.

44. The Desk Study on the environment in the Occupied Palestinian Territory, conducted by the United Nations Environment Programme (UNEP), observed that biodiversity and conservation problems had been aggravated in the present conflict by various means, including the following:

- Direct degradation from military operations
- Population pressures on natural systems owing to high growth rates and the continuing refugee crisis
- Growth of Israeli settlements where land is already scarce
- Restrictions on communications, movement and access, limiting environmental management measures
- Construction of the separation fence, blocking terrestrial fauna and cutting ecological corridors
- Solid waste and wastewater pollution
- Israel's clearing of vegetation for security, settlement and other purposes
- Fragmentation of areas, enforced by interim arrangements, making coherent and integrated approaches to environmental management impossible
- Lack of trust and cooperation between Israeli and Palestinian Authority institutions concerned with the environment, impeding cooperation.[24]

45. Industrial and waste-management practices are generally inadequate to preserve environmental health, and the required investment in treatment and protection measures is beyond the current means of most Palestinian institutions, even with the modest level of international assistance to date. More stringent Israeli standards do not apply in its settlements in the Occupied Palestinian Territory, owing to fiscal incentives and non-enforcement. Reportedly, this has caused migration of polluting Israeli industries, including asbestos, fibreglass, pesticide and flammable gas, notably in the settlements near Tulkarem (West Bank).[25] Further cooperation and field studies are needed to assess conflicting claims about contamination, such as from polychlorinated biphenals (PCBs) and radioactive waste, including possible depleted uranium munitions.[26]

46. Israeli closures and destruction of water and sanitation facilities and other infrastructure have degraded environmental health conditions, with children typically being affected disproportionately. Owing to army-imposed closures, solid waste disposal in the Gaza Strip has been particularly restricted, and this is also the case in all West Bank towns under the intermittent Israeli army curfews imposed since June 2002. Israeli army destruction of both the water network and sewage lines in Balata and Askar refugee camps (West Bank) has caused sewage to contaminate the water line, while Israeli army closures have hampered both personnel access to affected areas and material access to chlorine to administer needed remedial measures to treat the water supply. The World Health Organization

reported an outbreak of over 600 cases of shigellosis there between December 2002 and January 2003.

Public health

47. The World Health Organization has warned that the occupied Palestinian territory health system is in danger of collapse.[27] The crisis is reflected in a shortage of medicine/antibiotics used to treat injuries encountered; the inability of health personnel and patients to gain access to health facilities; and the lack of food, water and electricity. Frequent and long utility cuts have affected medicine supplies in central stores, and maintenance and other personnel have been prevented from reaching refrigerators and other equipment when needed to save precious supplies.

48. Closures and curfews have resulted in Palestinian health facilities operating at only 30 per cent capacity. There has been a 60 per cent decline in the implementation of school health programmes and similarly dramatic interruption of immunization coverage, including that for measles, tuberculosis (BCG) and polio.[28] UNRWA reports that only 46.5 per cent of refugee children are being immunized according to schedule. In addition, the Agency has reported a reduction in the use of preventive health services and a 52 per cent decrease in women attending post-natal care. Meanwhile, Israel's curtailment of Palestinian and international health worker movements has impeded epidemiological surveillance in the Occupied Palestinian Territory, making impossible the timely identification of, and response to, dreaded epidemic outbreaks.

49. On most days, 75 per cent of UNRWA health services personnel cannot reach their workplace. Consequently, 14,278 health staff workdays have been lost in the West Bank alone.[29] Despite the upgrading of 65 primary care centres, a recent survey by the United Nations Children's Fund (UNICEF) found that health workers had been unable to attend the clinics and that most centres had run out of essential medical supplies. The Director-General of the International Committee of the Red Cross described as absolutely unacceptable the fact that "useless humiliations take place" against Red Cross and Red Crescent staff and delegates in the field (A/57/207, para. 42).

50. Throughout the occupied Palestinian territory there are 100,000 persons with disabilities, either congenital or resulting from accidents. During the current crisis, Israeli settlers and soldiers have rendered 5,500 individuals permanently disabled through various acts of violence (Ibid., para. 61), such as incidents at the checkpoints and shootings. In the Jenin refugee camp assault, for example, three blind youths were left handcuffed in the street by the Israeli army for two and a half days. Other individuals with disabilities were also exposed to targeted army shooting (Ibid., paras. 62 and 63).

51. The Palestinian Ministry of Health reported that delays at checkpoints had resulted in 46 women delivering their babies while waiting for permission to pass through; as a result, 24 women and 27 newborn babies had died.

52. Soaring poverty has limited the local Palestinian food basket, leading to micronutritional deficiencies. Children and women are of special concern for nutritional depletion. A recent survey has shown a 15.6 per cent rate of severe

anaemia among children 6 to 59 months of age, and 6.6 per cent among non-pregnant women 15 to 49 years of age.[30]

53. The proportion of Palestinian children in the occupied Palestinian territory with wasting or acute malnutrition, one symptom of recent stress, is 9.3 per cent, four times the norm. The cases in the Gaza Strip are three times those in the West Bank (4.3 per cent versus 13.2 per cent), and the incidence is higher in non-urban areas than in urban centres (12.1 per cent as compared with 13.2 per cent).

54. Birth registers show a decline in the total number of births over the past several years, reflecting a trend begun before the *Intifada* and rooted in changing socio-economic conditions. While the birth rate was above 30 per 1,000 population per year in the mid-1990s, it dropped to less than 30 in 2001; the change is also partly attributable to delayed marriages.

55. The nature of the occupation and local conditions makes the collection of reliable data on population dynamics difficult, especially those on fertility, mortality and migration. While available mortality statistics are reported above, the birth rate has been a matter of considerable speculation.

56. Almost all children are exposed to violence, including shooting, witnessing violent death, and the destruction of their home and property, despite parental efforts to protect them from such horrors. Sleep-related dysfunctions are the most common manifestations of trauma. Distress among children especially leads to nightmares, bedwetting, insomnia and interrupted sleep patterns. Psychosomatic afflictions are common, including stress, headaches, stomach cramps, skin diseases, developmental regression, withdrawal, risk-taking behaviour, rebellion and rejection of authority, aggression and depression.

57. At the end of the 2002 incursions, a Bir Zeit University study showed 70 to 93 per cent of the interviewees reported at least one member of the family with mental health problems. Symptoms included great fear among children, manifesting in shivering, crying, appetite loss and sleeplessness.

Education

58. Violence and mobility restrictions keep children from educational opportunities. Neither teachers nor students can reach schools, and the Israeli army has destroyed 185 schools, while, of the 275 schools in the line of fire, others have been closed or are disused. Normal levels of classroom concentration are impossible in the unstable and often violent circumstances, especially when the army or settlers kill or injure a fellow student.[31]

59. There is no available assessment of academic achievement in the current school year, since Israeli-imposed closures and curfews have rendered examinations difficult to administer. Nevertheless, the United Nations Relief and Works Agency for Palestine Refugees in the Near East reports that final exam scores among refugee pupils in the Occupied Palestinian Territory for main curriculum subjects fell dramatically in 2002 as compared with 2000 and 2001. The proportion of students obtaining passing grades in Arabic declined from 71 per cent in 1999 and 2000 to 38 per cent in 2001; and the proportion with passing grades in mathematics dropped from 54 per cent to 26 per cent during the same period. The UNRWA compensatory

educational programme has since resulted in some recovery, but student achievement is still below the pre-2000 rates.

60. UNRWA schools reported the loss of 75,571 teacher days in 2001/2002, which is a 14-fold increase over the previous academic year. The consequent material cost to UNRWA regular school operations in 2001/2002 was $1,959,417, and an additional cost of $111,340 was incurred by the Agency's technical and vocational training programme.

61. With many schools closed, recreational and social activities are insufficient to meet children's needs. Moreover, many parents keep children indoors for their safety, although that does not prevent them from observing the conflict and suffering the moral and material losses.

62. With school systems failing to function, young people — the majority of Palestinians — have few productive outlets for their energies. Many children have sought odd jobs and dropped out of school to support the family, including selling gum and candy, washing car windows and selling newspapers. They run a high risk of long-term mental instability, physical insecurity, domestic violence and self-destructive behaviour. In East Jerusalem, this manifests itself in increased drug use and sales, reportedly with full knowledge of the Israeli police.[32] With 66 per cent of Palestinian residents of East Jerusalem living below the poverty line, the common correlation between indigence and drug abuse makes this aspect of life another indicator of Arab Jerusalem as the concentrated microcosm of the negative effects of occupation.

Economic situation

63. Owing to closures and the consequent loss of employment, Palestinian per capita gross national product declined by 12 per cent in 2000, 19 per cent in 2001 and 24 per cent in 2002. The sharp decline in Palestinian workers employed in Israel led to income losses of $757 million from October 2000 to end April 2002, or about 20 per cent of gross national income (GNI).

64. The decline in GNI has been considerable, dropping 23.2 in 2001 and 26.4, in 2002.[33] Estimates show that the crisis has already cost the Palestinian economy $5.4 billion in GNI, equivalent to the entire 1999 GNI, and over 50 per cent of 1999 gross domestic product. This is compounded by some $728 million in physical damage, including $150 million damage to donor-funded infrastructure.[34]

65. Poverty has risen substantially: 66.5 per cent of households are living below the poverty line, with a disproportionate number (84.6 per cent) in Gaza. Poverty levels have long-term consequences for public finance, trade balance, the savings-investment gap and social services. The Palestinian Authority has been forced into heavier dependence upon donor support for basic functions, diverting attention from long-term development goals.

66. Remittances from abroad have only partially offset the losses at the family and national levels. A total of 56.5 per cent of Palestinian households have lost more than half their income; more than 25 per cent (33 per cent in Gaza; 22 per cent in the West Bank) reported a loss of over 75 per cent; and 58.3 per cent have received humanitarian assistance, mostly in food aid. The dependency ratio has burgeoned to

more than 50 per cent. Whereas each bread winner was supporting an average of 5.1 persons in September 2000, she/he had to support 8.1 persons as of September 2002.

67. In comparison with the 128,000 workers from the occupied Palestinian territory employed in Israel in 2001, today 32,000 have been issued permits, of which only half can be used. In the meantime, foreign workers have filled the positions of many Palestinians formerly working in Israel, foreclosing the prospects of a return to former levels.

68. Recovery efforts seem remote. Most forms of aid seek to provide minimum welfare through humanitarian assistance. An unlikely doubling of donor support to a level of $2 billion could reduce the poverty rate only by 10 per cent,[35] and that only temporarily.

69. Production losses (manufacturing, construction, commerce, public and private services) have drastically increased where internal trade is nearly halted, reflecting a 75 per cent contraction in domestic output, for example, in April 2002. Palestinian enterprises have scaled down production activities, laying off employees; others have shut down completely. Diminished access to finance capital and building materials, and reductions in savings have forced a rapid decline in residential construction. Closures and destruction of crops have devastated the agricultural sector. Prior to 2002, the Israeli army had already destroyed 17 per cent of Palestinian productive agricultural crops, leading to a drop in production.[36]

70. Some 44 per cent of Palestinian households have had to reduce the quantity of their food, while 66 per cent have reduced the quality of food. Most (75 per cent) reported the reduction of monthly expenditures on meat of all kinds and on fruits, and 58 per cent have reduced their consumption of milk and milk products.[37]

71. Until recently, Israel had withheld Palestinian Authority revenues collected by agreement under the clearance system, including customs duties and excise taxes. By end February 2002, the loss amounted to $507 million. That, plus the declining ability to collect tax revenues, contributed to mounting Palestinian Authority budget deficits, leading to salary reductions and delayed liability payments,[38] borrowing on the commercial market and generally reducing expenditures on services. Through 2002, donors had contributed $40 million per month, or about half of Palestinian Authority spending, totalling $1.1 billion by the end of the year.[39] The Palestinian Authority public debt rose sharply to $1.2 billion by mid-2002.[40]

72. The informal economy, especially in West Bank villages, has expanded as impoverished households have resorted to desperate subsistence strategies. By 2002, the protracted conflict had exhausted most coping strategies, rendering families increasingly more dependent upon humanitarian assistance, including direct food aid and financial assistance.[41]

73. More Palestinian men than women have directly undergone the physical violence of Israel's military occupation, such as killing, injury, imprisonment and torture. In addition, as a result of the closures, detention and outright humiliation of commuting to jobs through Israeli checkpoints, the overall economic depression and resulting poverty have combined to prevent Palestinian men from performing their traditional role as breadwinners. Meanwhile, women's domestic roles and responsibilities have expanded, while their socio-economic roles and position have deteriorated. Among the consequences are the high levels of anxiety and despair that translate into domestic and apparently gender-based violence.

74. The socio-economic burden on Palestinian women has increased with their assumption of the role of head of household in the absence of the husband. In acute poverty, women have adopted coping strategies to maintain the domestic economy, such as planting, bartering or selling foodstuffs.

III. Occupied Syrian Golan

75. Israel has occupied the Golan Heights in the Syrian Arab Republic since 1967.

76. Under such a prolonged occupation, the consequences have been extensive, affecting all aspects of life for families, villages and communities. There has been no change in Israeli policy regarding the occupied Golan. The number of settlers has increased, with the 37 existing settlements expanded during the period under review.[42] Relations between the settlers and the Arab population remain tense, particularly where settlements are located close to Syrian villages.

77. The occupation of the Syrian Golan has perpetuated the separation of families who live on either side of the valley constituting the demarcation line. Syrian students returning to their families in the Syrian Golan Heights reportedly face severe interrogations and confiscation of their belongings. Others are reportedly held in arbitrary detention for many days, facing torture and humiliation.

78. School facilities are inadequate to cover the needs of all Syrian children of school age: among a population of 25,000 located in five villages, only 5,500 boys and girls are in overcrowded classrooms. A rapid school drop-out rate is putting the children in the labour market in Israel, where they receive a lower salary than others doing the same job. There is a shortage of health centres, hospitals or clinics, maternal care, and laboratories for basic analysis and emergency services.

79. The economic consequences of the occupation for the local population include a lack of equal employment opportunities, heavy taxes, fixed low prices imposed on the main agricultural products (for example, apples), arbitrary arrest and detention, and inadequate health care. Israeli authorities have depleted the Golan environment by uprooting trees, burning forests and allowing dumping of untreated chemical waste from factories in the Israeli settlements.

80. Settlers compete with Syrians in economic activities, especially in agriculture, the principal activity of the Arab population. This is compounded by the Arab population's restricted access to water as compared with the settlers.

Notes

[1] *Official Records of the General Assembly, Fifty-eighth Session, Supplement No. 13* (A/58/13).

[2] United Nations Technical Assessment Mission, *Humanitarian Plan of Action 2003 for the Occupied Palestinian Territory* (New York and Geneva, 2002).

[3] A/ES-10/186. Area A designates the vicinity where the Palestinian Authority has complete authority over civilian security.

[4] B'Tselem; available from http://www.btselem.org/english/statistics/imprisoned.asp.

[5] In response to a letter sent by the Public Committee against Torture in Israel (PCATI), 26 November 2002; available from http://www.stoptorture.org.il/eng/press.asp?menu=7&submenu=1&item=94.

[6] Al-Mezan Center for Human Rights, "Families have their homes destroyed for the second time; the IDF target water resources in Rafah" (press release 8/2003, 30 January 2003), available from http://www.mezan.org/main.htm.

[7] Land Research Center (Jerusalem); see http://www.lrcj.org.

[8] Al-Mezan Center for Human Rights; see http://www.mezan.org/main.htm.

[9] E/CN.4/2202/184, para. 15; A/57/207, paras. 32 and 69; and World Bank, *Fifteen Months — Intifada, Closures and Palestinian Economic Crisis: An Assessment* (Washington, D.C., 2002), chap. 3.

[10] See Mission to the Humanitarian and Emergency Policy Group of the Local Aid Coordination Committee, *The Impact of Israel's Separation Barrier on Affected West Bank Communities* (2003).

[11] Ibid.

[12] Yehezkel Lein, "Land grab: Israel's Settlement Policy on the West Bank" (B'Tselem, 2000). This is in addition to some 30 per cent of West Bank land that the Israeli army have confiscated and closed for other purposes.

[13] Shlomo Swirski, Etty Konor-Attias and Alon Etkin, *Government Funding of the Israeli Settlements in the West Bank, Gaza Strip and Golan Heights in the 1990s of Local Governments, Home Construction, and Road Building* (Tel Aviv, Adva Center, 2002). Values based on exchange rate of NIS 4.45 per United States dollar.

[14] See Dror Zaban, *Israeli Government Expenditures for Settlements, 2001-2002* (Jerusalem, Peace Now, January 2003).

[15] "Plan for five new colonies in Rimal Haloutza near the Egyptian border", *Monitoring Israeli Colonizing Activities in the Palestinian West Bank and Gaza* (Applied Research Institute Jerusalem, 14 January 2003), available from arij.org/paleye/index.htm.

[16] According to the Palestinian Center for Human Rights (Gaza), for each 100 km road, some 10,000 dunums (2,500 acres) of land are confiscated. Available from http://www.pchrgaza.org/. Path: Statistics/Settlements.

[17] Ministry of Agriculture, "Report on Palestinian agriculture losses due to recent Israeli action: September 2000-February 2002" (Ramallah, Palestinian Authority, 2002).

[18] B'Tselem, "Thirsty for a solution: the water shortage in the occupied territories and its resolution in the final status agreement", position paper (Jerusalem, 2000).

[19] United States Agency for International Development, "Report of the West Bank and Gaza mission", (Washington, 1999); and World Health Organization, *Guidelines for Drinking Water Quality* (Geneva, 1998), available from http://www.who.int/water_sanitation_health/dwq/guidelines/en.

[20] Al-Mezan Center for Human Rights, op. cit.

[21] See B'Tselem, "Not even a drop: the water crisis in Palestinian villages without a water network" (Jerusalem, B'Tselem, 2001).

[22] The World Bank had counted 23,000 by early November 2001. See *Fifteen Months — Intifada, Closures and Palestinian Economic Crisis: An Assessment* (2002). See also Applied Research Institute of Jerusalem (ARIJ).

[23] The 42,000 dunums in 1971 had already been reduced to 2,000 by 1999. See http://www.arij.org.

[24] Based on findings of the *Desk Study on the Environment in the Occupied Palestinian Territories* (Nairobi, United Nations Environment Programme, 2002), available from http://www.unep.org/Documents. Path: press releases, July 2002.

[25] Ibid.

[26] Ibid.

[27] World Health Organization, *West Bank/Gaza Strip Health Update* (4 April 2002).

[28] Ibid.

[29] Palestinian Ministry of Health.

[30] The Palestinian Central Bureau of Statistics, the United States Agency for International Development (USAID), al-Quds University and Johns Hopkins University have shown an increase in malnourishment and anaemic children. The Bureau survey showed 9.2 per cent moderate to severe malnutrition among children 6 to 59 months old. In the same survey, non-childbearing women from 15 to 49 showed moderate to acute malnutrition at 5.5 per cent. The USAID survey showed those instances at 13.2 and 9.3 per cent respectively.

[31] See Conal Urquhart, "Playground bombing injures 20 Palestinians", *The Guardian* (UK), 10 April 2003. Jewish extremists from the shadowy "Revenge of the Infants" group claimed responsibility for exploding a bomb in a West Bank school playground on 9 April 2003 at the village of Jaba'a, south of Jenin, wounding 20 children.

[32] Amira Hass, "Under the noses of the Israeli police", *Ha'aretz*, 4 February 2003.

[33] World Bank, *Two Years of Intifada, Closures and Palestinian Economic Crisis: An Assessment* (Washington, D.C., 2003)

[34] Ibid.

[35] Ibid.

[36] Palestinian Economic Council for Development and Reconstruction (PECDAR), "People under siege: Palestinian economic losses, September 2000-September 2001" (Ramallah, 2002).

[37] According to the Palestinian Central Bureau of Statistics.

[38] $527 million in arrears at June 2002.

[39] World Bank, *Two Years of Intifada, Closures and Palestinian Economic Crisis: An Assessment* (Washington, D.C., 2003). The Arab League contributed $840 million, and the European Union $230 million.

[40] *MAS Economic Monitor*, No. 6, April 2000; "Interview with Palestinian Authority Finance Minister Salam Fayyad", *Al-Ayyam* (Ramallah daily), 6 July 2002.

[41] United Nations Special Coordinator in the Occupied Territories, "Paying the price: coping with closure in Jericho, Gaza City and in two Palestinian villages" (Gaza, January 2002).

[42] Some 77 per cent of the residents are European/North American by birth. Available from http://www.fmep.org/images/charts/chart0007_1.jpg.

United Nations A/58/76

General Assembly

Distr.: General
9 May 2003

Original: English

Fifty-eighth session
Item 93 (b) of the preliminary list
Macroeconomic policy questions:
Science and technology for development

Impact of new biotechnologies, with particular attention to sustainable development, including food security, health and economic productivity

Report of the Secretary-General

Summary

Pursuant to General Assembly resolution 56/182 of 21 December 2001 on science and technology for development, the present report provides information on sectors and countries where biotechnology is making a significant contribution to economic productivity and human welfare. The report identifies measures that need to be taken in order to build indigenous capabilities in biotechnology. It addresses the impact of new biotechnologies, with particular attention to sustainable development, including food security, health and economic productivity, and puts forward proposals on the aspects of the transfer of such technologies, in particular to developing countries and countries with economies in transition, while taking into account the need to protect intellectual property rights and the special needs of developing countries.

03-35609 (E) 060603

Contents

		Paragraphs	Page
I.	Introduction	1–3	3
II.	Global development goals and the biotechnology revolution	4–35	3
	A. Overview of the global impact of biotechnology	11–16	5
	B. Impact of biotechnology in developing countries	17–29	6
	C. Concerns related to biotechnology	30–35	8
III.	Factors affecting technology transfer to developing countries	36–47	9
	A. Public consensus	36	9
	B. National research strength	37	9
	C. Intellectual property rights	38–40	10
	D. Traditional knowledge and biodiversity	41–43	10
	E. The Biosafety Protocol	44–46	11
	F. Public pressure and interest	47	11
IV.	Current biotechnology status in developing countries	48–51	12
V.	Proposals for biotechnology development and technology acquisition	52–72	12
	A. Possible models for technology transfer and development of biotechnology	52–60	12
	B. Examples of national efforts to acquire technology	61–66	14
	C. The role of different players in these models	67–69	15
	D. National biotechnology development strategy	70	15
VI.	Proposed role of the United Nations	71–73	16
VII.	Conclusion	74–77	16

I. Introduction

1. At its fifty-sixth session, the General Assembly adopted resolution 56/182 of 21 December 2001 on science and technology for development, by which it recognized the role of the Commission on Science and Technology for Development in coordinating the activities of the United Nations system in the area of science and technology for development and the role of the United Nations Conference on Trade and Development (UNCTAD) as the secretariat responsible for the substantive servicing of the Commission. By the same resolution, the General Assembly recognized the importance of establishing and strengthening partnership and networking among the public and private sectors and academic institutions of all countries to build, transfer and strengthen the technological capabilities and skills needed, in particular for developing countries. It also recognized the need for dissemination of research knowledge, technology and expertise in the field of biotechnology, in particular in the areas of agriculture, pharmaceuticals and health care, that could benefit mankind.

2. The Secretary-General was requested to submit to the General Assembly, at its fifty-eighth session, a report on the impact of new biotechnologies, with particular attention to sustainable development, including food security, health and economic productivity, with the inclusion of proposals on the aspects of the transfer of such technologies, in particular to developing countries and countries with economies in transition, while taking into account the need to protect intellectual property rights and the special needs of developing countries, as well as on addressing constraints on the adequate utilization of such technologies. The present report has been prepared by the UNCTAD secretariat in response to that request.

3. The present report identifies sectors and countries where biotechnology is making a significant contribution to economic productivity and human welfare as well as the needs for capacity-building, technology transfer and political will. It develops models based on successful biotechnology development case studies in developing countries in relation to sustainable development and technology transfer and protection. The report also takes into account the work of the Commission on Science and Technology for Development on biotechnologies in developing countries and countries with economies in transition.

II. Global development goals and the biotechnology revolution

4. The major challenges faced by humanity are outlined in the Millennium Development Goals.[1] Admittedly, about a billion men, women and children still live under dehumanizing conditions despite the availability of modern technology that can bring relief to some of the many human sufferings. It is estimated that 95 per cent of the 840 million people that are undernourished live in developing countries. The World Food Summit noted that "hunger is both a cause and an effect of extreme poverty [that] prevents the poor from taking advantage of development opportunities".[2] Given that about 52 per cent of the population of developing countries depends on agriculture in comparison with only 7 per cent in developed countries, developing agriculture in poorer countries will take many people out of extreme poverty.

5. Many people in developing countries still die from curable and preventable diseases despite the progress in medical sciences. Infectious and parasitic diseases account for about 52 per cent of all deaths in Africa compared with about 2 per cent in Europe. Many people still lack access to medical care, and the supply of drugs for some of the most devastating diseases remains limited. For example, there are more drug options for pain relief in developed countries than drugs for malaria in the tropics.

6. Biotechnology, a collection of techniques or processes that employ organisms or their units to develop useful products and services, has the potential to become a powerful tool in meeting the challenges posed by food insecurity, industrial underdevelopment, environmental degradation and disease. Traditional biotechnology includes plant and animal breeding and the use of micro-organisms and enzymes in fermentation, preparation and preservation of product as well as in control of pests among others. Modern biotechnology mainly refers to the use of recombinant deoxyribonucleic acid (DNA) techniques (the transfer of genetic material from one organism to another) and detailed analysis of the genetic information of organisms. However, the two are not mutually exclusive as modern techniques are used to empower traditional methods. For example, recombinant enzymes and genetic markers have been employed in traditional biotechnology methods, such as fermentation, plant and animal breeding.

7. The Millennium Development Goals may be more easily met with the extensive application of modern biotechnology in agriculture and health. New and more effective vaccines and drugs against diseases, such as human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), malaria and tuberculosis, will be needed. Similarly, more food of high nutritional value has to be produced to meet the expanding needs of the world's rapidly growing population.

8. The main beneficiaries of the current biotechnology revolution are largely developed countries. For example, United States of America, Canada and Europe account for about 97 per cent of the global biotechnology revenues, 96 per cent of persons employed in biotechnology and 88 per cent of the total biotechnology firms.[3] Developing countries are lagging behind in adoption and development of biotechnology processes, products and services. Biotechnology has yet to deliver products in agriculture, health, industry and environment in developing countries.[4]

9. While an even distribution of technology is unlikely to be achieved, it becomes a source of concern when large sections of the population and of continents do not benefit from the existing biotechnology applications. Ensuring that those who need the technology have access to it remains a major challenge. Similarly, creating a conducive environment for the acquisition, adaptation and diffusion of biotechnology in developing countries remains a major challenge. Furthermore, the current debate over the safety of genetically modified organisms has swayed the attention of policy makers away from the wider benefits of biotechnology to transgenic crops. The term biotechnology has almost become synonymous with genetically modified organisms.

10. In order to bridge these gaps, Governments should take important steps. Firstly, developing countries have to increase the pace at which they pursue, acquire, adapt and diffuse new innovations. Secondly, developed countries should help developing countries to build the necessary capacity needed to develop, manage and

use biotechnology. Thirdly, developing countries and countries with economies in transition have to invest their limited resources in applications that generate wider, but also attainable, benefits for their economies. Finally, stable and beneficial strategic partnerships between developed and developing countries and among developing countries have to be established.

A. Overview of the global impact of biotechnology

11. In 2001, the biotechnology industry was estimated to have generated US$ 34.8 billion in revenues and employed about 190,000 persons in publicly traded firms worldwide. An estimated 4,200 public and private biotechnology firms were in operation. These are impressive results given that, in 1992, the biotechnology industry was estimated to have generated US$ 8.1 billion and employed less than 100,000 people.[5]

12. The number of modern biotechnology drugs and vaccines has increased, from about 23 in 1990 to over 130 by 2001. There are about 350 biotechnology-derived drugs and vaccines in clinical trials targeting over 200 diseases. A number of organisms have had their genomes (genetic material) sequenced or decoded. The human, mosquito and malaria-causing organism (*Plasmodia falciparum*) genomes are among those that have been sequenced. These activities are expected to accelerate the pace of drug and vaccine discoveries.

13. The area of farmland planted with transgenic crops or genetically modified organisms has increased from about 2.8 million hectares[6] in 1996 to about 52.6 million hectares[7] in 2001. Of this, transgenic soya was planted on 33.3 million hectares, accounting for about 63 per cent of the total area planted with transgenic crops. This growth is expected to continue as more countries commercialize transgenic crops.

14. The use of biological catalysts or enzymes has entered almost every industry. There are at least 600 different products and more than 75 types of enzymes that are used in industries. The major industries that already use biological catalysts include food processing, leather and textiles, personal care, pharmaceuticals and cleaning. The global market for industrial enzymes is worth about US$ 1.6 billion. The demand for other biotechnology-related products, such as feed additives, has continued to grow with vitamins and amino acids accounting for about US$ 3 billion and digestive enhancers for US$ 1.3 billion.[8]

15. Biotechnology has also been used to reclaim wasteland through the use of micro-organisms and plants that remove and/or degrade toxic compounds. Some firms have incorporated biotechnology techniques in their production to decrease energy and water consumption, improve productivity and reduce the number of processing steps. All these actions could lead to an improved environment, sustainable use of resources and increased productivity.

16. Biotechnology-related applications and products have penetrated many sectors of the economy. The technology has begun to overcome the bottlenecks that, in the last century, favoured chemical substitutes against biological ones. For example, aspirin is derived from a plant but is synthesized chemically owing to limitations with biological processing. It is clear that the economic, scientific and social impact of biotechnology is already being felt.

B. Impact of biotechnology in developing countries

(a) Agriculture

17. Current agricultural biotechnology products mainly involve crops that are engineered to resist pest attacks and to tolerate herbicides. The most widely grown crops globally include soybeans, maize (corn), cotton and canola, which, together, account for more than 90 per cent of the area planted with transgenic crops. The area planted with transgenic crops in developing countries has grown from 1.2 million hectares to about 14 million hectares over the last six years.

18. Developing countries are slowly but steadily adopting transgenic products. The number of developing countries growing transgenic crops has steadily increased, from three (Argentina, China and Mexico) in 1996 to seven (Argentina, China, Indonesia, Mexico, Romania, South Africa and Uruguay) in 2001.[9] Argentina accounts for about 80 per cent of the acreage in developing countries, and China has recorded increased growth (threefold) in acreage in 2001. India has approved the release of transgenic cotton, and Brazil is expected to commercialize transgenic soybeans once legal technicalities are resolved. This may increase the number of countries to nine and, more significantly, include some of the major food producers and exporters. This is encouraged by the positive impact of transgenic crops in terms of increased yields and reductions in pesticide applications.

19. Research into crops that are specific to developing countries is limited to a few public and non-profit institutions in developed and developing countries with a strong scientific base. Cassava, potatoes and rice are among the crops that are benefiting from alliances between developed and developing countries' institutions interested in generating products specifically for developing nations. There is limited interest from the private sector in developing transgenic crops of interest to developing countries.

20. There are no countries that have commercialized transgenic fish or transgenic animals as of now. Many countries, including developed countries, are yet to develop measures to ensure the safe production and use of transgenic animals. Transgenic fish are likely to reach the market earlier than transgenic animals. Cuba has developed a fast-growing tilapia by using another fish gene. China has developed a number of transgenic animals, while the Republic of Korea has the capacity to develop transgenic animals.

(b) Health

21. Developing countries such as Cuba and India are becoming major centres of health-related biotechnology research and development, production and marketing. Products developed in developing countries are likely to be of great value as those countries share many common health problems. For example, Cuban biotechnology institutions have developed or are developing vaccines, drugs and diagnostic kits for tropical diseases such as meningitis, cholera and malaria. Other developing countries represent one of Cuba's main markets.

22. There are also international public-private partnerships for vaccines and drugs development that are of great interest to developing countries. These public-private partnership ventures currently focus on developing drugs and vaccines against malaria, HIV/AIDS and tuberculosis with the aim of making the final products

affordable to developing countries and generate the needed products within a reasonable time. At least one vaccine candidate is currently undergoing the first phase of trials in Kenya, another targeting HIV is undergoing the first clinical trials in the United States and a malaria vaccine is also undergoing the first phase of trials in the Gambia. There are at least six HIV vaccine candidates under development.

(c) Industry

23. The biotechnology industry has expanded. For example, it is estimated that at least 43 companies and 41 research institutions in Africa, 90 companies and 500 research institutions in China and 50 companies and 40 research institutions in Brazil are involved in biotechnology. Similarly, the biotechnology sector employs about 12,000 scientists in Cuba and 9,000 researchers in the Republic of Korea.[10]

24. Biotechnology applications are being used in textiles, wood, pulp, leather, food and mineral processing and in the production of fine chemicals. South Africa developed the world's first biotechnology-based gold-processing system (bioleaching or use of micro-organisms in hydrolyzing mineral ore) called the Biox process. Biox has been used in Ghana's gold mines as well. The system has since been further developed and applied to other minerals, such as zinc and nickel. Chile and Zambia have also experimented with the use of biotechnology in processing copper.

25. It is estimated that Asia has the fastest-growing market for feed additives, followed by Latin America. The estimated global market for feed additives is about $6 billion. This growth is expected to continue as demand for animal products is expected to increase. In biofuels, Brazil remains the leader in production and consumption. However, China may be commissioning the world's largest biofuels plant. The use of biotechnology in industry is expected to increase in developed and developing countries.

(d) Sustainability

26. The United Nations Convention on Biological Diversity deals with issues of sustainability with respect to biotechnology. The Convention aims to protect biological diversity (biodiversity), promote its sustainable use and share the benefits arising from its use fairly and equitably on the basis of the mutual agreement of contracting parties. It promotes the safe use of biotechnology and recognizes the role of traditional knowledge and the value of biological resources that are the backbone of biotechnology inventions. This requires that exploitation of biological resources not result in the loss of those resources or a loss of variety and/or contamination.

27. The link between biotechnology and sustainability has been an issue of great interest and controversy. It is clear that biological processes used in industry and the environment may reduce waste generation, are easy to destroy, consume less water and energy and are user-friendly and cost-effective.[11] Similarly, the use of transgenic crops is improving yields and reducing the cost of production and the use of harmful chemicals on farms. In addition, biotechnology products are used in diagnosis of pollution and in bioremediation (recovery or cleanup of polluted areas) as well as breeding of endangered species.

28. However, there are legitimate concerns that genes in plants may flow to closely related plants, induce resistance in targeted organisms and could lead to dependency on a few biotechnology-derived high-performing crops. The deliberate release of genetically modified organisms could have devastating consequences. This scenario has been one of the bases of the controversy over genetically modified organisms.

29. Biotechnology may revolutionize the strategies needed to conserve biological diversity. These efforts are still very minimal but are likely to become routine procedures in many laboratories. However, this will only receive wide public support once the regulatory regimes operate on minimum agreed safety standards and provide balanced information on the benefits and risks of biotechnology. In many countries, regulatory regimes governing the development and use of biotechnology products are still in the early stages of development.

C. Concerns related to biotechnology

(a) Public awareness and participation

30. Many developing countries face a difficult task in raising public awareness of issues related to biotechnology. Common constraints include poor public access to the mass media, low levels of literacy and education, language differences within the same country and the costs associated with conducting sustained awareness programmes. The situation is compounded by the general low level of science education, public interest and the will to give the public a genuine voice in the policy-making process.

31. There is a need for scientists to actively engage with the public concerning biotechnology and its products. There is also a need for dialogue between the scientific community, the mass media, industry and the government in order to provide balanced information to the general public and receive feedback. With respect to biotechnology, public trust in government authorities and the mass media seems to be low, particularly in Europe. Restoring public trust requires that the authorities involved in raising awareness are perceived to be competent, knowledgeable and respectable. Governments may have to provide safety information on biotechnology products and services.

(b) Regulatory and management issues

32. The implementation of the Cartagena Protocol on Biosafety of the Convention on Biological Diversity and the establishment of biosafety review processes have been very slow. This situation has led to regulatory failures, indecisions and inconsistencies. Directives have often been made, sometimes with little regard to the biosafety review process or scientific recommendation, mainly in response to public concerns. These uncertainties have affected biotechnology development and increased safety concerns, especially in developing countries and countries with economies in transition that have a great deal of biological diversity.

(c) Economic risks

33. The current regulations on transgenic products differ from one region to another. The two main markets, the United States and the European Union, have

different regulations, which, in some cases, have been changing and have not been very clear with respect to genetically modified products. For example, the labelling requirements and the limits on foreign genetic materials in food products are unclear and impose an extra burden on poor farmers. In many cases, the facilities to follow and enforce these guidelines do not exist. Therefore, these measures may be perceived to discriminate against products from developing countries.

34. Biotechnology could potentially displace a number of chemical products, especially in agriculture, and possibly dislocate production bases as plants may grow well under previously hostile conditions. Those that depend on these markets for their livelihood are likely to be affected. Similarly, there are cases regarding the patenting of products that have already been used by people in developing countries for many years. This has tainted the image of the biotechnology industry. These issues constitute economic risks associated with biotechnology that need to be considered even when the products being displaced may be unfriendly to the environment or inferior in quality. Addressing economic concerns may be important in resolving some of the current issues surrounding biotechnology.

(d) Environmental and health risks

35. Although there has been no strong evidence to demonstrate the risk of biotechnology products to the environment or human health, the public in some countries are sceptical of the safety of transgenic crops. There are concerns that genes inserted in crops may migrate to related species, induce resistance in targeted organisms and induce crops to produce allergens or compounds with harmful effects. It is the assessment and management of risks that is of great concern to developing countries owing to an inadequate scientific foundation. It may not be possible for them to depend on the scientific base of developed nations for managing the risks posed by biotechnology products given the differences in lifestyle and the environment.

III. Factors affecting technology transfer to developing countries

A. Public consensus

36. While the benefits of biotechnology are recognized, public consensus has not matched the enthusiasm expressed in international forums. For example, in 1992, through Agenda 21, great enthusiasm and hope was placed on the ability of biotechnology to offer new opportunities for global partnerships and serve the needs of sustainable development. Since then, the controversy surrounding genetically modified organisms in agriculture has dampened the initial support. This has affected the implementation of some of the programmes articulated in Agenda 21, such as finance, technology transfer, capacity-building and management.

B. National research strength

37. The numbers of specialized biotechnology-related scientists remain very low, especially in Africa. The facilities that are needed for biotechnology product development do not exist or are in a poor state, while in a few countries they are just beginning to emerge. In some countries, they remain initiatives driven by a few

individuals or institutions working in isolation. Integration of these efforts is needed to make them competitive and effective.

C. Intellectual property rights

38. Intellectual property protection in biotechnology is applied through patenting in mainly developed countries. Many have argued that patents present a hurdle to developing countries wishing to acquire protected innovations, while others argue that, without patents, incentives to develop these innovations will be low.

39. For many developing countries and countries with economies in transition, patents may present a hurdle if a country is unable to meet licensing fees and/or royalties demanded by owners or if owners deny a country access at a reasonable price. Such a hurdle may also increase the price of the final product, making it unaffordable by consumers in less developed countries.[12] Patents on some biotechnology innovations remain contentious even in developed countries, especially as previously complex procedures become routine activities of standard laboratories. A continuous review of national patent regimes is required in order to match developments in technology.

40. However, for countries without biotechnology development plans or the capacity to utilize proprietary knowledge, patents are not yet an issue. These countries need to build a biotechnology research foundation to allow them to utilize innovations that are protected by patents. Therefore, countries may have to protect and respect intellectual property rights for them to be trusted by owners of such technologies to build useful partnerships and strategic alliances. It may then be possible to negotiate for access to technologies at a reasonable price based on economic realities and social needs, among other factors.

D. Traditional knowledge and biodiversity

41. The market for alternative and complementary medicine is estimated at US$ 2.4 billion in Japan and US$ 2.3 billion in the United Kingdom of Great Britain and Northern Ireland. The United States market of herbal medicines stood at US$ 5.4 billion in 2000, while at least 80 per cent of Africans use herbal medicine.[13] About 75 per cent of people in France have used alternative medicine. These are staggering figures that should have encouraged the formation of public-private partnerships to increase the consumption and safety of herbal medicine.

42. The Convention on Biological Diversity remains the main international regime that specifically addresses traditional knowledge. A voluntary guideline on the use and protection of traditional knowledge was established in 2002. However, the lack of international regimes that advocate respect and protection of traditional knowledge in a manner comparable to the Trade-Related Aspects of Intellectual Property Rights (TRIPS) remains a source of concern. Cases of biopiracy (accessing biological materials without permission) have been reported in Africa, Asia and Latin America.

43. The use of biological resources to acquire advanced technology through bioprospecting ventures remains very low. This situation has been compounded by weakness in the scientific base in developing countries, which is required in order to

add value to natural resources through isolation, identification, purification and primary functional analysis. Costa Rica is one country that has acquired some biotechnology capacity through bioprospecting contracts. Kenya and Nigeria have also entered into bioprospecting agreements. The effectiveness of these arrangements remains unknown. However, they represent an important opportunity in building public-private partnership.

E. The Biosafety Protocol

44. Article 22 of the Cartagena Protocol on Biosafety to the Convention on Biological Diversity provides for:

> "the needs of developing country Parties, in particular the least developed and small island developing States among them, for financial resources and access to and transfer of technology and know-how in accordance with the relevant provisions of the Convention, shall be taken fully into account for capacity-building in biosafety ... include scientific and technical training in the proper and safe management of biotechnology".

Therefore, the Protocol included aspects of technology transfer.

45. The implementation of the Protocol has been slow and some countries see biosafety as running contrary to biotechnology development. By November 2002, 103 countries had signed the Protocol and 38 countries had either ratified or acceded to it. The United Nations Environment Programme (UNEP) and the Global Environment Facility (GEF) have a joint project that is helping developing nations to integrate biosafety issues related to biotechnology in their national legislation and to establish mechanisms for assessing and managing the use of biotechnology products.

46. The emphasis on biosafety has been driven by the belief that laws must be in place before the scientific base is developed. Countries are categorized into those without regulations, those with draft legislation and those with legislation, rather than the level of technical know-how required to implement or guide the development of these regulations. Therefore, the use of the Biosafety Protocol to transfer technology has largely not materialized given the fast pace of technological turnover.

F. Public pressure and interest

47. The current debate on biotechnology is seen as important in raising public awareness and participation in decision-making. However, this debate is not tailored to bring about a public consensus that encourages investment in biotechnology and technology transfer. The debate should have been helpful for technology transfer in general and not to those who are in favour of or against a specific biotechnology merely on the basis of trade interest or public opinion even without having the capacity to manage and handle biotechnology products. Governments have responded to the claims of each side by issuing a barrage of decrees, declarations and directives that have kept changing. This has been done at the expense of future technology advancements.

IV. Current biotechnology status in developing countries

48. Technology transfer in biotechnology may be seen occurring on at least three levels. The first involves the transfer of research techniques and procedures required in developing innovations. The second involves the transfer of knowledge for commercial scale processing and manufacturing technologies. The third involves the marketing of the biotechnology product and utilization either by secondary industries or other forms of consumers and markets.

49. The science of microbiology or the use of microbes in applications such as pest control or in medicine has a long history. Most countries possess such biological resources and some limited technology in dealing with them. However, the ability to identify useful strains and generate sufficient amounts of consistently high-quality organisms at an economical price is limited to a few countries. The use of tissue cultures for mass reproduction of some plants exists in some developing countries. However, its application to generating animal tissues (for example, skin used in treating burns) artificially, is not available in most developing countries.

50. There are other forms of biotechnology applications that are in limited use, which include the generation and use of antibodies (molecules that fight disease) for diagnosis of diseases; the use of molecular genetic markers to detect diseases in animals and plants; and the ability to screen, analyse and generate large amounts of genetic information (long DNA sequences). In addition, even the capacity to generate transgenic plants and animals (genetically modified organisms) is limited to a few countries.

51. Most developing countries are lagging behind in adopting, developing and using new biotechnologies. They are often using older technologies that are less productive. Many of these older technologies can be complemented with new biotechnologies, thus making them more productive. For example, in plant improvement, controlled and target-specific breeding employing modern biotechnology techniques is more successful and faster than traditional (that is, blind) breeding techniques alone.

V. Proposals for biotechnology development and technology acquisition

A. Possible models for technology transfer and development of biotechnology

(a) The public-private-academia approach

52. The national biotechnology programme, in this model, draws representatives from industry, government and universities/research institutions at home and abroad to form an advisory committee and a platform for execution of projects. It identifies areas of interests, challenges and opportunities. The body should oversee development and implementation of national biotechnology programmes. A government representative at the level of a Minister or Deputy Minister should represent the Government on this initiative.

53. Universities have abundant qualified manpower that could be harnessed to carry out most of the research activities. Industries could serve as product

development facilities while government provides the needed incentives. This could lead to quick transfer of technology between research institutions and industry.

54. National Governments should fund the development of biotechnology without a large increase in their national budget. The international community of donors should also be encouraged to fund biotechnology projects within their areas of cooperation, such as health, agriculture and education. The national programme has to ensure that biotechnology is part of bilateral and multilateral agreements.

55. Teams may be formed around technological and market niches. For example, a team of interested industries, academia and government experts may work together to develop biofertilizers for a given market or be contracted by a municipal council to manage a damping site using bioremediation technologies. Identifying projects at the national level based on economic and social relevance (for example, mining, manufacturing and health) but with the potential of exposing many teams to advanced technologies and partnerships at an economical price could help improve the development of local facilities, manpower and partnerships.

56. At the operational level, the body serves to develop timely policies, monitor resource use and implementation of projects. For example, manpower development is a major challenge but could be "created" or generated quickly by the introduction of course programmes that span subject and discipline boundaries at the graduate level. These include courses in biomanufacturing, bioengineering, bioentrepreneurship, bioprospecting and biopolicy among others. These courses may quickly upgrade competencies and numbers of scientists and researchers needed to develop a biotechnology sector. Such courses could be implemented through collaboration between universities (teaching/research), industry (industrial attachments and production) and government (favourable policies). Such courses could help in creating public-private partnerships rather than pure sciences.

(b) A modified incubator approach

57. Incubators are facilities where young firms could be nurtured to become independent and strong entities. Many developing countries have worked with incubators, such as "village industry development facilities", "small industries development organizations" and "farmers' training centres". These facilities were often located far away from research institutions or universities. The modified incubator model seeks the location of similar facilities inside or within walking distance from universities/research centres to encourage a constant exchange of knowledge.

58. National Governments, municipal councils, industry and academia could establish incubator facilities where scientists, industrial experts and students could develop their ideas into concepts and eventually into products and services. The incubators provide space, access to professional and technical advice, and management. University incubators are less costly and best suited for poor countries. Biotechnology incubators have been successfully used in Brazil, among others.

59. However, the success of an incubator is determined by the types of knowledge it packages into firms, the effectiveness of management and the ability to attract funding through its projects. Many projects may not be funded in isolation, irrespective of their value, but may be funded through incubators if the facility has

acquired a good reputation. Firms have to be encouraged or even assisted to grow so that they can move out of the incubator. The impact of incubators is measured by the number of successful firms graduated rather than the number of firms in residence. Generally, periods of about three to five years are required to graduate knowledge-intensive firms.

60. It is also important to note that these models are not mutually exclusive. For example, incubators exist in the Republic of Korea and India as part of their national biotechnology development programmes. Incubators are included as an independent model because they could be formed at the provincial, district and institutional levels. Furthermore, they allow the testing of ideas and products before national initiatives are launched. It is equally important to note that different versions and combinations of these models are likely to be formed on the basis of institutional strength, regulation and organization.

B. Examples of national efforts to acquire technology

(a) Biotechnology development in the Republic of Korea

61. The biotechnology development strategy of the Republic of Korea, as contained in the Korea Biotech 2000 plan, is composed of three main phases. The first phase (1994-1997) was aimed at acquiring and adapting bioprocessing and improving the performance of research and development investments. The second phase (1998-2002) focused on consolidation of the scientific foundation for development of novel products. The last phase (2003-2007) targets biotechnology market expansion locally and internationally.

62. To meet these goals, the Republic of Korea has since 1982 encouraged universities to open biotechnology-related departments and research institutions. The country has also established strategic partnerships with centres in China and the United Kingdom for research. The Government is estimated to have invested US$ 500 million while the private sector invested an additional US$ 1 billion in the first four years. It also set aside funds to help establish 600 biotechnology-related ventures by the end of 2003.

63. The Republic of Korea has developed a complete biotechnology industry strategy addressing all the core aspects, such as human resource development, research facilities, financial needs, marketing and management capabilities. The strategy relies on public and private sector partnerships to help local institutions access international centres to stay abreast of new developments. The biotechnology sector has imported most of the enabling technologies such as fermentation, vaccine and drug production know-how.

(b) Cuban biotechnology sector

64. Cuba has established a number of specialized institutions, which includes the Centre for Genetic Engineering and Biotechnology, in immunology, biomass conversion, animal production and tropical medicine. Since 1980, the biotechnology industry has expanded from a single laboratory to over 190 research units. Cuba developed a competent manpower base in medical sciences through training programmes at home and in countries such as France, Mexico, Japan, Switzerland

and the United States. This manpower formed the backbone of the biotechnology industry. Some of the equipment was also imported from abroad.

65. Cuba's research and development expenditure as a percentage of its gross domestic product was estimated at 1.2 per cent, and the country is thought to have invested about $1 billion over the last 20 years in biotechnology. In return, Cuba's biotechnology centres have produced at least 160 medical products, 50 enzymes and probes for diseases among others. By 1998, the biotechnology sector was making up to $290 million in sales, making the sector the fourth largest foreign exchange earner after tourism, tobacco and nickel exports.

66. The Cuban biotechnology industry is a network or cluster of supportive institutions. It comprises research and development, exports and imports, manufacturing, information and communication, maintenance, advisory and policy, and regulatory institutions. This structure promotes recombination of knowledge and is cost-effective. Although the Cuban biotechnology is government-managed and driven, it has all the characteristics of a mature privately managed business cluster.

C. The role of different players in these models

67. *National Governments*. The government in most developing countries is the main source of policy and funding irrespective of its economic strength. Governments may provide support that may save money, such as relaxed tax policies for the biotechnology industry or incentives for investment and the creation of new jobs and a market for biotechnology and its products.

68. *Private sector*. The private sector provides entrepreneurship and the industrial leadership required to move innovations into marketable products and services. They should also fund innovations and advise the government in setting policies for the biotechnology industry.

69. *International community*. Bilateral and multilateral donors and non-profit funding agencies continue to play an important role in providing development assistance to developing countries. However, most donors' position on biotechnology is unclear. For nations that are more dependent on foreign aid, biotechnology development may be slowed or hindered without donor support.

D. National biotechnology development strategy

70. The most common features of successful biotechnology development programmes include the following:

(a) Clear government plans to develop a biotechnology industry with benchmarks on objectives to be attained by each stage of development (number of scientists trained, products developed and technologies acquired);

(b) Establishment of biotechnology-related programmes (research, development and marketing) in universities and national research institutions;

(c) Involvement of the private sector in planning the biotechnology development agenda through matching funds, sharing facilities and technologies;

(d) Establishment of international collaboration and partnerships for research and development, production and marketing (for example, technical cooperation);

(e) Provision of public venture capital to fund small start-up firms and the commercialization of research products;

(f) Policies and programmes that stimulate entrepreneurship in public institutions and investments. These include policies on commercialization and ownership of knowledge and allowing scientists to interact freely with industry;

(g) Incentives for public-private partnerships. These include government contracts, directives on publicly funded projects and international strategic partnerships.

VI. Proposed role of the United Nations

71. An integrated framework for biotechnology development could be helpful to developing countries. It could be implemented in similar fashion to the UNEP-GEF biosafety programme but focusing on technology development. The plan should have three components: (a) *policy development*, focusing on the ability of national, regional and international regimes to generate policies that accelerate technology development and commercialization; (b) *private sector involvement*, focusing on national and international firms with an interest in biotechnology development; and (c) *training*, with a focus on universities and research facilities by helping to develop programmes in selected national universities.

72. It is important to ensure that this initiative does not overlap or conflict with existing programmes focusing on biosafety and bioethics. The initiative would focus on all aspects of biotechnology, that is, industry, health, agriculture and environment. It could also serve as an advisory unit for developing countries on new trends in biotechnology innovations, and on policy and trade. This may help developing countries to become leaders in formulating policies as the technology develops.

73. Setting up such an initiative would require financing. Special consideration will have to be given to the needs of the least developed countries and small island developing States to help them develop the basic foundation for manpower training and research and development initiatives. The initiative should be designed to bring benefits not only to the various programmes within the United Nations system, but also to programmes at the national and regional levels.

VII. Conclusion

74. Biotechnology has become an important component of the scientific, economic and social life of society. It cuts across all areas of human activities. Its impact on agriculture, health, environment, manufacturing, energy and mining among other sectors is already being felt, and the economic and social benefits have become a reality. For these reasons, biotechnology presents unique opportunities for developed and developing countries and small and large enterprises.

75. Developing and implementing science and technology policies that encourage the adoption, use and development of innovations in developing countries to meet

their needs are required. Such policies could take into account the provision of incentives, such as public funding, formation of public-private partnerships, technology acquisition, market access and protection of innovations.

76. In this way, biotechnology will become part of the global fight against poverty, hunger, disease and underdevelopment, which have a direct bearing on school attendance, infant mortality, maternal health and freedoms associated with a decent standard of living. It is not a question of whether it will deliver the promises but how the promise of biotechnology will be shared. It is in the interest of humanity, in developed and developing countries, that safe biotechnology applications are used as widely as possible.

77. Similarly, the policies governing biotechnology have to be harmonized so that they do not disadvantage developing countries and countries with economies in transition. Biotechnology has the potential to dislocate the production base, wipe out some industrial platforms and displace products in the market place. Some developing countries lost their sisal market to synthetic fibres and sugar to artificial sweeteners. Unless developing countries keep up with advances in biotechnology, they may lose out again. The cost of leaving some countries behind may be higher than the cost of empowering them to become players in mastering and benefiting from biotechnology.

Notes

[1] Development goals contained in the United Nations Millennium Declaration adopted by the General Assembly at its fifty-fifth session.

[2] See Food and Agriculture Organization of the United Nations, Committee on World Food Security; World Food Summit and Millennium Development Goals, CFS:2001/2-Sup.1.

[3] See Ernst & Young (2002), *Beyond Borders: Global Biotechnology Report 2002*.

[4] Ibid.

[5] Ibid.

[6] See C. James (1997), *Global Status of Transgenic Crops in 1997*, International Service for the Acquisition of Agri-biotech Applications Brief No. 5.

[7] See C. James (2001), *Global Review of Commercialized Transgenic Crops, 2001*, International Service for the Acquisition of Agri-biotech Applications Brief No. 24.

[8] United Nations Conference on Trade and Development, 2002, "The new bioeconomy: industrial and environmental biotechnology in developing countries" (UNCTAD/DITC/TED/12).

[9] See C. James (2001), *Global Review of Commercialized Transgenic Crops, 2001*, International Service for the Acquisition of Agri-biotech Applications Brief No. 24.

[10] United Nations Conference on Trade and Development, 2002, "The new bioeconomy: industrial and environmental biotechnology in developing countries" (UNCTAD/DITC/TED/12).

[11] See Organisation for Economic Cooperation and Development (2001), *The Application of Biotechnology to Industrial Sustainability*.

[12] For example, patent-protected (prescription) drugs cost many times more than generic drugs owing to the value attached to technology. Many useful products (for example, HIV retroviral therapies) stay above the reach of consumers in poor countries.

[13] See World Health Organization, *Traditional Medicine Strategy 2002-2005* (WHO/EDM/TRM/2002.1).

United Nations A/58/77–E/2003/62

General Assembly
Economic and Social Council

Distr.: General
9 May 2003

Original: English

General Assembly
Fifty-eighth session
Item 106 (a) of the preliminary list*
Follow-up to the International Conference on Financing for Development

Economic and Social Council
Substantive session of 2003
Item 6 (a) of the provisional agenda**
Implementation of and follow-up to major United Nations conferences and summits: follow-up to the International Conference on Financing for Development

Summary by the President of the Economic and Social Council of the special high-level meeting of the Council with the Bretton Woods institutions and the World Trade Organization (New York, 14 April 2003)

Summary

The 2003 special high-level meeting of the Economic and Social Council with the Bretton Woods institutions and the World Trade Organization (WTO) provided a unique occasion for substantive deliberations on the implementation of the Monterrey Consensus of the International Conference on Financing for Development at all levels one year after the Conference. Those proceedings can provide important input to the high-level dialogue of the General Assembly on financing for development, to be held on 29 and 30 October 2003. Indeed, participants in the dialogue may wish to pay special attention to the following points.

With regard to process, the decision in situ by the Chairs of the round tables to focus the dialogue in each round table on a different theme of the Monterrey Consensus proved successful. It led to fruitful discussions in all round tables and in the plenary. This thematic approach should be taken into account in the organization of the high-level dialogue.

* A/58/50/Rev.1 and Corr.1.
** E/2003/100.

03-35751 (E) 060603

As to substance, the discussion in the Council suggests that the high-level dialogue of the General Assembly should address the following key issues of central concern:

- Improved measurement of national and international efforts and outcomes for the implementation of the Monterrey Consensus, including aid flows and their impact
- Additional steps that could be taken after the WTO Ministerial meeting in Cancún, Mexico, to increase the chances that the multilateral trade negotiations under the Doha Development Agenda are completed on time
- National and international measures to enhance debt sustainability of low-income countries in order to reduce the frequency and amplitude of debt defaults
- Further exploration of mechanisms for orderly debt workouts with multi-stakeholder participation
- Strengthened participation of developing countries in decision-making processes on economic policies, particularly in the international financial institutions
- Increased coherence on a priority basis in the areas identified at the meeting (see section VI below).

I. Introduction

1. The special high-level meeting of the Economic and Social Council with the Bretton Woods institutions and the World Trade Organization (WTO) was held on 14 April 2003. The theme of the meeting was "Increased coherence, coordination and cooperation for the implementation of the Monterrey Consensus of the International Conference on Financing for Development at all levels one year after the Conference". The meeting had before it a note by the Secretary-General (E/2003/50) that provided background information and raised a number of questions for consideration. Major stakeholders in the financing for development process gathered in the first fully reconstituted meeting after Monterrey to take stock of and maintain the political momentum for the implementation of agreements and commitments reached at the International Conference on Financing for Development.[1]

2. The Monterrey Consensus[2] gave a specific role to the annual spring meetings of the Economic and Social Council with the Bretton Woods institutions in the follow-up to the Conference. The preparations for the 2003 meeting and its format were thus changed to enable it to fulfil that new role. Preparations involved extensive consultations within the Council and with the management of the Bretton Woods institutions and WTO, as well as a meeting with Executive Directors of the World Bank. In addition, informal hearings and dialogue with members of civil society and the business sector were held on 20 and 21 March 2003. The outcome of those contacts was presented at the 14 April meeting (see addenda 1 and 2 to the present report).

3. The format of the meeting featured a brief opening plenary, followed by four parallel round tables. The round tables consisted of interactive discussion on, respectively, systemic issues, financial cooperation and debt, policy coherence in the area of trade and investment, and domestic economic and social policies. A resumed afternoon plenary was devoted to reporting back on the discussions in the round tables and to a further debate. The Chairs and co-Chairs of the round tables were: Trevor Manuel, Chair of the Development Committee of the Bretton Woods institutions and Minister of Finance of South Africa, and Louise Frechette, Deputy Secretary-General of the United Nations, for round table 1; Hilde Frafjord Johnson, Minister of International Development of Norway, and Francisco Thompson-Flores, Deputy Director-General of WTO, for round table 2; Mary Whelan, Chair of the Trade Policy Review Body of WTO, and Shengman Zhang, Managing Director of the World Bank Group, for round table 3; and Fathallah Oualalou, Minister of Economy, Finance, Privatization and Tourism of Morocco, and Eduardo Aninat, Deputy Managing Director of the International Monetary Fund (IMF), for round table 4.

4. A new feature in the 2003 meeting was the participation of a representative of the WTO intergovernmental machinery, the Chair of the Trade Policy Review Body of WTO, as well as of the President of the General Assembly and a significant number of Executive Directors of the World Bank and IMF. In addition, the Chairs of the Development Committee and of the Group of 24, and senior officials of the United Nations, World Bank, IMF, the United Nations Development Programme and other United Nations agencies took part in the event. Other participants included ministers of finance, ministers of development cooperation, governors of central banks and heads of international organizations, and a rich mix of high-level officials in the areas of trade, finance, development cooperation and foreign affairs (see

E/2003/INF/3). Representatives of non-governmental organizations and the private sector participated in the plenary and round tables in greater numbers than in the past.

5. What follows is a summary of the deliberations largely structured according to the leading issues addressed in each of the four round tables. Since ministers and representatives referred to the current economic situation, particularly when presenting the outcome of the recent spring meetings of the Bretton Woods institutions, a brief initial section on that topic is also included.

II. The world economic outlook

6. Several ministers and representatives of multilateral institutions referred to the state of the world economy. They pointed out that global economic growth remained unsatisfactory. Private investors remained hesitant and consumer confidence was weak. In most developed countries output remained well below potential. There were positive signals for an improvement of overall conditions in the second half of 2003, yet political and economic uncertainties still clouded the horizon. Serious downward risks, mostly on account of global imbalances, might prevent the acceleration of world economic growth in the near future. The challenge for national policy makers and strengthening international cooperation was huge.

7. There were widespread concerns about the economic impact of the war in Iraq, particularly on developing countries. Substantial humanitarian and development assistance to the people of Iraq was necessary. In that respect, the International Monetary and Financial Committee of the Board of Governors of IMF and the Development Committee had noted that a new resolution from the Security Council would be required. Should that resolution be forthcoming, the Bretton Woods institutions stood ready to support economic and social development in Iraq.

8. The plight of low-income countries, particularly those in sub-Saharan Africa, continued to require the sustained attention of the international community. Volatile and weak commodity prices, drought and the effects of the HIV/AIDS pandemic in a significant number of countries presented major obstacles to sustained economic growth and development. Many of those countries had made remarkable strides in economic reform. Yet, official development assistance (ODA) and the trade environment had not improved as expected. The Monterrey Consensus had called for substantial increases in ODA, enhanced debt relief and progress in the trade negotiations, but according to a number of ministers, results had failed to materialize so far. The attainment of the Millennium Development Goals[3] was being jeopardized.

9. The decline in private financial flows to developing countries was an additional concern. It was particularly important to re-establish the conditions for increased foreign investment flows. That required domestic measures to reduce vulnerabilities and collective efforts to restore confidence in the international economy.

10. A number of ministers and many representatives put forward broad guidelines for sustained world economic recovery. Perseverance with pro-growth macroeconomic policies was necessary in most developed countries in the short term. Actions were also necessary to correct current global imbalances in a medium-

term framework. Improved structural policies were required in virtually all countries, as agreed in the Monterrey Consensus.

11. The realization of a more dynamic world economy benefiting all countries rested on four pillars: (a) peace and political stability, particularly in countries currently affected by serious conflicts; (b) establishment of a stable international economic and financial environment; (c) decisive steps towards attaining the Millennium Development Goals, including by substantial increases in ODA; and (d) progress in multilateral trade negotiations under the Doha Development Agenda,[4] especially by improving market access for the agricultural products of developing countries by eliminating trade-distorting subsidies and reducing domestic support schemes in advanced countries.

III. Domestic policy approaches

12. Ministers and representatives stressed that each country had responsibility for its own economic development. At the same time, it was recognized that policies by both developed and developing countries were necessary to generate stronger economic growth and achieve sustainable development. In developing countries, it was important to: (a) improve the environment for investments and private sector activity, including macroeconomic stability and enhancing physical infrastructure; (b) strengthen governance; and (c) increase human capital through broader and more effective delivery of social services.

13. Governance was the starting point on the road to successful development. Yet, it was difficult to develop solid institutions in low-income countries, particularly when qualified human resources were scarce. A major effort in education supported by international cooperation was indispensable. Moreover, it was necessary to reduce the waste of resources in all countries by eliminating corruption.

14. Sound macroeconomic policies and progress in structural reforms were necessary not only for sustained economic growth but also for achieving poverty eradication goals. Some participants stated that capital flight — which in some cases exceeded financial assistance — was undermining investments in many countries. That could be a signal that policies had to be modified. Regarding fiscal management, it was noted that strict annual deficit and expenditure targets often prevented countries from carrying out additional public investments that could be financed through development loans from abroad or through revenues from privatization. Such obstacles could be overcome without hindering long-term fiscal sustainability by adopting a medium-term fiscal framework as well as by separating consumption and investment expenditures in the annual budget.

15. Many representatives stressed that effective ownership and participatory approaches in the design of domestic policies and institutional changes were the key to their successful implementation. But a long-term vision and continuity in the reform process were also necessary. Results were rarely immediate or automatic and required perseverance and strong leadership to maintain the pace of reform. In a number of cases, before embarking on an ambitious reform programme it was advisable to estimate carefully and analyse its social and economic costs and benefits. A joint consideration of such costs and benefits with development partners supporting the reform programme could substantially increase the effectiveness of

development assistance while at the same time improving the timing and sequence of the reforms being pursued.

16. In a large number of countries, especially in Africa, modernization of agriculture was the key to sustainable development, since the bulk of gross domestic product and employment originated in that sector. However, national development strategies to take full advantage of the potential of that sector faced some constraints, including unfair competition from many advanced countries and conditions set down in adjustment programmes that prevented the use of subsidies for fertilizers. In addition, in most developing countries the potential for small- and medium-scale enterprises was vast. Improved access to credit, including microcredit, was central to realize the entrepreneurial capacities of men and women. It was recalled that in the United States small- and medium-scale enterprises continued to provide over half of employment opportunities.

17. Several ministers stressed that reviewing progress made towards the Millennium Development Goals was one of the keys to their effective implementation. Developing countries played a critical role in the monitoring process; therefore, their capacity to measure results should be improved. The Millennium Development Goals provided a focal point for partnership efforts of developing and developed countries and they were to be reflected in their national policies. In that context, the importance of anchoring the efforts to achieve the Millennium Development Goals in the Poverty Reduction Strategy Papers (PRSPs) was underlined. Moreover, some participants stressed that the cross-cutting nature of human rights, gender equality and the empowering of women should be recognized as critical to the achievement of all development goals.

18. According to several participants, international institutions were frequently inclined to lecture countries regarding appropriate policy approaches. Yet, many pointed out that domestic policy approaches were country-specific. There was no global formula and a measure of flexibility and realism in the implementation of reforms was crucial. It was suggested that international institutions should improve their capacity for a more effective dialogue with recipient countries.

IV. International trade

19. Multilateral trade negotiations under the WTO Doha Development Agenda concentrated the attention of most participants in the trade discussions at the meeting. Negotiations had become more complex. Not only had the variety of issues increased, but so had the number of countries and specific interests involved in the negotiations. It was difficult to assess the whole picture at the current stage. Many might see the glass as half empty while others might see it as half full.

20. The Doha Declaration reflected a strong development perspective. Trade was an engine for growth, as underlined in the Monterrey Consensus. The implementation of the Doha Development Agenda was an ambitious undertaking for WTO, a government-driven organization, in which developing countries comprised a significant majority. It was critical to move forward the negotiations before the WTO Ministerial Meeting in Cancún in September 2003 so that the meeting could harvest the substantial progress. Many representatives indicated that major strides at Cancún were necessary to restore the credibility of the multilateral trading system.

21. Progress so far had been uneven. Some areas of special interest to developing countries posed significant problems: agricultural trade liberalization in developed countries, operationalization of special and differential treatment for developing countries, trade-related aspects of intellectual property rights (TRIPS) and public health-related issues, and the difficulty experienced by a number of developing countries in implementing agreements. Nevertheless, in some areas of the so-called Singapore issues — investment rules, competition policies, transparency of government procurement and trade facilitation — there was forward movement. Yet, there were different views on how those issues should be treated in the forthcoming negotiations. While some participants reaffirmed the importance of treating them jointly and keeping them as a key element of the negotiations, others questioned their priority, while still others suggested that they should be treated individually.

22. A number of ministers and representatives stated that it was critical to improve market access for developing countries. That required primarily the elimination of trade-distorting subsidies and the reduction of support measures for agriculture, and the removal of tariff peaks in developed countries. Yet, it was noted that the erosion of trade preferences and non-subsidized agricultural imports would have an adverse impact on several developing countries.

23. According to some participants, it was necessary to incorporate human rights and environmental and gender perspectives into trade policies. The potential conflict between the environmental agreements and the WTO agenda was highlighted. In that context, a number of representatives felt that environmental standards should not be employed as a restraining instrument for market access.

24. Several representatives underlined the need of trade-related technical assistance for national capacity-building and stressed the key role of the United Nations Conference on Trade and Development in that regard. Such assistance was critical for many countries to enable them to participate effectively and benefit from the multilateral trade negotiations. Additionally, it was important to consider assistance to address supply-side constraints. That could be particularly relevant in the case of least developed countries and heavily indebted poor countries to enable them to take advantage of increasingly liberalized markets. Moreover, it was proposed to use the WTO Trade Policy Reviews as a mechanism to consider national trade policy in the context of overall national development and poverty reduction strategies.

V. Financial cooperation and external debt

25. Various ministers and many other participants referred to the critical role of ODA in achieving the Millennium Development Goals. The additional annual amount of US$ 12 billion pledged in Monterrey was an important step. However, money was not coming quickly enough and the pledges in Monterrey fell far short of the additional US$ 50 billion that was estimated to be necessary to achieve those goals. It was important that donor countries deliver on their commitments to attain the 0.7 per cent target. Some representatives pointed out that it seemed to have been easier to mobilize billions of dollars for the war in Iraq than for poverty alleviation. In many developing countries, poverty remained rampant and national efforts to eradicate it required international support. Moreover, the economies of most low-

income countries remained vulnerable to severe shocks that would set back national efforts unless aid was forthcoming.

26. The proposal made by the United Kingdom to create an international financing facility to bring forward ODA disbursements through 15-year bond issues to be serviced with future ODA flows was seen as an interesting innovation to speed up aid flows. It seemed important to continue to explore innovative ways to increase ODA. It was also proposed that mechanisms be developed to monitor ODA publicly in order to identify actual flows and reduce the time lag of disbursements.

27. The decline in international private flows was a concern shared by several representatives. While an improved domestic and international environment should go a long way to increase such flows substantially, ODA could make a significant contribution in leveraging such flows. Moreover, enhancing public/private partnerships, as for example in infrastructure development, could also help to mobilize additional international private flows.

28. Several ministers and representatives stressed that ODA effectiveness had become a critical issue. In several areas, changes were taking place, but much remained to be done by donors and recipients on their own and jointly. Greater coordination of donor policies and harmonization of procedures were necessary. Such measures, together with untying of aid, could significantly reduce transaction costs for recipient countries. The latter had to refine budget procedures and develop indicators to improve the impact assessment of aid projects. It was important that donors not multiply demands for information and that they assist in streamlining the indicators to be requested. In addition, the proliferation of separate international sectoral programmes with their respective different funds to deliver them was a cause for concern. The view was expressed that no new international funds for special sector needs should be created.

29. The fact that much unfinished business remained in the Heavily Indebted Poor Countries (HIPC) Initiative was a concern shared by many participants. Although there had been some progress in its implementation, only a few countries had reached the completion point and, in some of those cases, debt sustainability was still in question, particularly since the prices of primary commodities were depressed. The commitments to fill the financial gap in the HIPC Trust Fund were welcome. Fulfilling such commitments, together with the national efforts of beneficiary countries and more flexible conditions, could significantly expedite increasing the number of countries reaching the completion point.

30. The inclusion of collective action clauses by an increasing number of countries in international sovereign bond issues was a welcome step. The efforts made by IMF in developing a concrete proposal for a sovereign debt restructuring mechanism (SDRM) had served to promote better understanding of the issues to be addressed in resolving financial crises. It was also stated that during the consideration of the mechanism, several issues of general relevance to the orderly resolution of financial crises had been brought up. Thus, it was important that work on those issues should continue.

31. There were several suggestions on approaches to tackle the debt problems of developing countries. Some called for a policy to cancel what they considered illegitimate external debt. There was a proposal to expand the HIPC Initiative to non-HIPC countries straining to service their debts. There was also a call for

adopting a debt-sustainability criterion for highly indebted poor countries that would facilitate the achievement of the Millennium Development Goals. It was suggested that an open, joint working group on debt within the framework of the Financing for Development process which would include all the relevant stakeholders — debtor countries, creditors, experts and civil society representatives — should be established to recommend a coherent debt work-out mechanism to be applied when needed to crisis countries. It was also suggested that Governments consider a code of conduct for debtor-government behaviour during external debt crises on the basis of a proposal developed by a group of private financial organizations.

VI. Coherence and governance

32. One representative stated that coherence should be viewed as how Governments, institutions and non-governmental participants could best pull together the many distinct strands of economic policy into a clear framework for action. That is, how they could work together in fulfilling the commitments made at Monterrey. Gradually, there had been a convergence of views among the main actors that boded well for the challenges of implementing the Monterrey Consensus.

33. Policy coherence was crucial at the domestic and international levels. Several ministers emphasized that the foundation for international economic policy coherence lay at the national level. Effective coordination was indispensable among the ministries of finance, trade, development cooperation and foreign affairs. Instructions to country representatives to the United Nations, the Bretton Woods institutions and WTO should be consistent with the commitments in the United Nations Millennium Declaration,[5] the Doha Ministerial Declaration, the Monterrey Consensus and the Johannesburg Plan of Implementation.[6]

34. Several representatives identified areas in which increased coherence was particularly important. Increased market access for developing countries was necessary for smooth external debt servicing. Trade and aid policies as well as TRIPs and the provision of low-cost generic drugs had to be mutually supporting. Modernization of agriculture and accelerated rural development in low-income countries needed liberalization of international agricultural markets. Effective ownership of development policies required donors to be more sensitive to the needs and structural weaknesses in recipient countries.

35. A number of participants pointed out that there was progress towards increased coherence. The current meeting was a testimony to that. The United Nations, the Bretton Woods institutions and WTO shared a common purpose and cooperative work on the Millennium Development Goals and the follow-up to the Monterrey Consensus had intensified. In that context, it was mentioned that the PRSP approach — a key instrument for policy coherence in low-income countries — had become a common denominator among multilateral institutions. IMF was aligning the Poverty Reduction and Growth Facility to PRSP requirements. Moreover, in its surveillance work in developed countries, IMF was increasingly raising the issue of policy coherence, which was an important tenet of the Monterrey Consensus.

36. Several representatives were of the view that a development policy review mechanism should be considered. The scheme — largely modelled on the WTO Trade Policy Review Mechanism — would serve as a basis for intergovernmental and expert-level discussions in the United Nations by the Second Committee of the

General Assembly and the Committee for Development Policy, respectively. Under that proposal, individual developed and developing countries would submit on a voluntary basis to a review of their policies and their mutual coherence in the context of commitments made in the Millennium Declaration, the Monterrey Consensus and the Brussels Declaration[7] and the Programme of Action for the Least Developed Countries.[8] It was also stated that, within the framework of the Financing for Development process, the United Nations should become a central forum for discussions on innovative proposals on financial issues, with the participation of all relevant stakeholders.

37. Some ministers and a number of participants expressed fundamental concerns regarding the process of international decision-making. In an era of globalization and interdependence, multilateral cooperation and the institutional approaches that had long characterized the governance of the international system were under stress. The Monterrey Consensus had identified a major gap in governance. For all countries enhanced domestic governance was the key to sustained economic growth and equitable development. Furthermore, enhanced governance at the national level had to be complemented by improved governance at the international level, including more effective participation and representation of all members of the international community in the decision-making process.

38. Many representatives stressed that the voice and representation of developing countries in economic decision-making should be strengthened, as agreed in the Monterrey Consensus. It was stated that participants in the recent Development Committee meeting had considered the issue of participation. Some initial steps had been taken in the Bretton Woods institutions to enhance the voice of some developing countries. The members of the Development Committee intended to follow up on the issue at its next meeting in September 2003. Several representatives welcomed the discussions on increasing the voice of developing countries in the Development Committee as well as the decision by WTO to facilitate access to non-members. However, several speakers were of the view that not enough had been achieved to enhance the effective participation of developing countries in the Bretton Woods institutions.

39. A number of ministers and various participants put forward diverse proposals. At the United Nations, the proposal to establish an economic security council was reiterated. At the Bretton Woods institutions, a "rebirth" could be considered in the context of their sixtieth anniversary; redistribution of votes could be an important element to explore. To enhance the voice and participation of developing countries there was a need to reduce the size and complexity of the governance structure of the Bretton Woods institutions, for example, by reducing the number of ad hoc groupings of countries. More cooperative efforts should be deployed to enhance the capacity of poor countries to be represented and articulate their position in the Bretton Woods institutions and WTO more effectively. Proposals should be explored for new decision-making approaches within the United Nations framework. It was necessary to strengthen and use increasingly regional institutions and groupings as a way to enhance the voice and participation of smaller and poorer countries in financial and economic decision-making.

VII. Concluding observations: staying engaged

40. The consideration by the Economic and Social Council of the outcome of the 2003 spring meetings of the Bretton Woods institutions and of the note by the Secretary-General (E/2003/50) prepared for the special high-level meeting of the Council with the Bretton Woods institutions and WTO provided very rich material on which the Council could build. As identified in the Monterrey Consensus, the theme of coherence and consistency of the international monetary, financial and trading systems in support of development was at the core of the discussions at the meeting. A key challenge addressed was how governmental and non-governmental organizations could best pull together the many strands of economic policy into a clear framework for action. The contribution of each participant — whether as representative of Government, international institutions, civil society or business — showed that the spirit of Monterrey was still very much alive. However, the discussions also showed that, despite some progress, there were significant gaps in implementation in some key areas. That signalled that all partners needed to strengthen their efforts towards comprehensive and swift implementation of the Consensus. The Council remained fully engaged in working with all stakeholders towards that goal.

41. Speakers expressed appreciation for the approach followed in the organization and format of the 2003 meeting and the several innovations that had enhanced its discussions. Member States were called upon to provide further feedback on how the annual spring meeting of the Council and the high-level dialogue of the General Assembly could best serve their purpose of furthering engagement in the implementation of the Monterrey Consensus. The Ad Hoc Working Group of the General Assembly on the Integrated and Coordinated Implementation of and Follow-up to the Outcomes of Major United Nations Conferences and Summits in the Economic and Social Fields was expected to lead to concrete recommendations that could strengthen political engagement in the pursuit of development goals, including on the most effective mechanism for monitoring and review of progress, and on how to carry forward, in the work of the United Nations, the new approaches and spirit that had emerged in the preparatory process for the Monterrey Conference.

42. Several participants stressed the critical role of the Bretton Woods institutions and WTO in the development process and in the implementation of the Monterrey Consensus and the importance of benefiting from their expertise and know-how. Many speakers welcomed the sense of ownership of the Consensus by the international financial and trade institutions and they expressed the will to implement it. The gathering sense of common purpose boded well for tackling the formidable challenges ahead. There was a need for further strengthening the cooperation on technical issues of mutual concern between the secretariats of the major institutional stakeholders concerned. The contribution of civil society and the private sector, especially by creating a positive and transparent atmosphere and concrete initiatives, was also noted. It was mentioned that the European Union would undertake a first review of its own follow-up to Monterrey in May 2003, when it was expected to finalize an action plan on ODA. A number of participants stated that the positive impact of the Consensus was only starting to surface, pointing to the need for its full implementation.

43. **The high-level dialogue at the upcoming General Assembly would be an important opportunity for taking stock more fully of progress made in the implementation of the Monterrey Consensus and for considering further steps. In preparing for that dialogue, certain aspects of the discussions in the 2003 meeting of the Council with the Bretton Woods institutions and WTO might be of special relevance. In particular, it was clear that the in situ decision of the Chairs of the round tables to narrow the focus of the dialogue in each round table to a separate theme of the Monterrey Consensus had led to fruitful discussions in all round tables and in the plenary. Indeed, the emphasis given to some key subjects suggested that they were especially salient to Member States and should receive focused attention during the high-level dialogue. Those key subjects were:**

(a) **The partnership of developed and developing countries embodied in the Monterrey Consensus required effective measurement of national and international efforts and outcomes in the implementation process. What could countries do individually and collectively to improve such measurement, including of aid flows and their impact?**

(b) **Enhanced market access for developing countries, particularly in agriculture was seen as critical for raising exports and accelerating development. What steps could the General Assembly take after the Cancún Ministerial Meeting of WTO in September in order to increase the chances that the multilateral trade negotiations under the Doha Development Agenda were successfully completed on time?**

(c) **It remained an open question whether low-income countries, in some cases even after relief under the HIPC Initiative, had sustainable external debt burdens. What more could be done domestically and internationally to reduce the risks of the return of external debt problems?**

(d) **There was unfinished business regarding international approaches to orderly debt workouts and further multi-stakeholder reflection was warranted. How could the United Nations facilitate such a process?**

(e) **Representation of developing countries in decision-making on international economic policy needed strengthening, particularly in the Bretton Woods institutions, as expressed in the meeting. How might the high-level dialogue of the General Assembly support governance reform efforts in those institutions?**

(f) **Several policy areas in which coherence was lacking were identified in the discussions, as summarized in the present report. Should the international development agenda explicitly seek to resolve such coherence problems on a priority basis?**

Notes

[1] *Report of the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002* (United Nations publication, Sales No. E.02.II.A.7).

[2] Ibid., chap. I, resolution 1, annex.

[3] A/56/326, annex.

[4] See A/C.2/56/7, annex.

[5] See General Assembly resolution 55/2.

[6] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 1, annex.

[7] A/CONF.191/12.

[8] A/CONF.191/11.